A search for personality disorder screening tools

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Publication date:
2011

Document Version
Publisher's PDF, also known as Version of record

A search for personality disorder screenings tools: A helping hand in the daily practice for the busy clinician

door

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ISBN: 978-90-5335-443-8
Printed by: Ridderprint BV, Ridderkerk, the Netherlands
Lay out: Nikki Vermeulen, Ridderprint BV, Ridderkerk, the Netherlands
Coverphoto: P.H. Germans-van der Kemp
Masks on photo: D.W. van den Akker & P.H. Germans-van der Kemp

A search for personality disorder screening tools: A helping hand in the daily practice for the busy clinician

Proefschrift ter verkrijging van doctor
aan Tilburg University
op gezag van de rector magnificus,
prof. dr. Ph. Eijlander,
in het openbaar te verdedigen ten overstaan
van een door het college voor promoties
aangewezen commissie
in de aula van de Universiteit
op vrijdag 23 september 2011 om 14.15 uur

door

Sara Germans,

geboren 23 november 1972 te Eindhoven

Promotores:

Prof. dr. P.P.G. Hodiamont

Prof. dr. G.L.M. Van Heck

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PREFACE

A female patient, 30 years old, was isolated for approximately 7 years in an area of a chronic illness department. At the time of her debut, she was diagnosed with mood disorders, and years later she was diagnosed with psychosis. She was treated for those disorders. The result was a pattern of automutilative behavior with serious and permanent damage. This patient had severely damaged her legs to the extent that she required an upper and lower leg amputation, which meant that she was unable to walk. Furthermore, she had spinal nerve damage (after a suicide attempt) that made it necessary for her to have a catheter. She was against having a catheter and caused herself further injury by pulling out the catheter. To control her automutilative behavior, the staff saw no other alternative than to isolate her from her personal belongings and other patients. After several years of treatment and isolation, the diagnosis was re-evaluated and Borderline Personality Disorder (BPB) was added. New treatment was started with focus on her BPD. For the patient, the new treatment was too late to be of benefit as her downward spiral was irreversible; she died at the age of 35 from complications caused by her automutilative behavior.

It was sad and remarkable that the patient managed in the last week of her life to communicate in a normal fashion. In addition, she apologized to personnel and family for her past difficult behavior and thanked them for all the good care. Apparently, her BPD died two weeks before she died.

This extremely sad case leaves us with the question: How different would the outcome have been for this patient if she had been diagnosed with the complete diagnosis, which means the inclusion of BPD, earlier in the treatment? This case has stayed with me and impressed upon me how important and destructive PDs are when considering the whole spectrum of psychiatric diseases. Later on in my specialization as a psychiatrist, I saw a group of patients with the same problems though not as extreme as the above case. The patients were often diagnosed with an axis 1 diagnosis after a structured interview, but the PD was often diagnosed after a year of treatment, which resulted in an unnecessarily long wait for the correct treatment for these patients.

When I worked on the team that assessed patients in the beginning of their treatment it was difficult to diagnose an axis-2 diagnosis, and I was aware of the importance of it. Therefore, I searched the literature for the best practical way to do so, and found in the British Journal of Psychiatry an article called *Standardised Assessment of Personality- Abbreviated Scale (SAPAS): Preliminary validation of a brief screen for personality disorder. (Moran et al, 2003).* Within the article an eight item screening instrument for personality disorders was introduced. The results were very promising. Unfortunately, I did not find similar instruments in the Dutch language. Guided and motivated by the research of this article, we, Paul Hodiamont, psychiatrist and my supervisor at that time, and myself, decided to make the focus of my dissertation screening for personality disorders of psychiatric (out)patients. Paul Hodiamont brought me in contact with Prof. Guus Van Heck, a psychologist and expert in the area of personality, who was very helpful

with the theoretical framework for this project. Working with the two of them was inspiring and motivating, and the exchange of ideas and discussion with these two professionals was invaluable.

The result of this collaboration is the following dissertation.

CHAPTER 1

General introduction

GENERAL INTRODUCTION

Prologue

The focus of this dissertation is screening of personality disorders (PDs). Therefore, this general introduction will describe the concept 'personality'. Thereafter, we describe the concept and the historical development of the topic 'personality disorder' (PD). Then, we shall discuss the development of screening from the first structural rules of Wilson and Jung (1968) to the more practical rules from Andermann et al. (2008). Finally, we will present an outline of the thesis and the current studies.

Personality

Personality is derived from the Latin word 'persona' and originated in the Greek and Roman amphitheatres, where the actors could not easily make themselves heard in the far most seats. It occurred to somebody to place a small megaphone behind the mouth-opening of the actors' masks, through (*per-)* which the sound (*sona*) could be magnified. Personality represented the intensification of the individual features of the character the actor was portraying. Does the term 'personality' describe the outer personality or facade presented to others by an individual (the mask) or the inner personality that reflects more of what is behind the mask?

Personality psychology tries to explain why people think, feel and act the way they do. Establishing a definition for personality that reflects modern conceptualizations in such a way that there is high consensus is rather difficult. Most textbooks and introductions to the field of human personality try to describe this broad branch of psychology by capturing all aspects of the uniqueness of individual functioning. In an attempt to define personality psychology in a comprehensive way, Larsen and Diener (2002), conceive of personality as a set of psychological traits and mechanisms within individuals that are organized and relatively enduring and that influence their interactions with, and adaptations to the intrapsychic, physical, and social environments. This definition makes clear that personality is more than just a mask. In 1937, Allport said that in everyday life, no one, not even a psychologist, doubts that underlying the conduct of a mature person there are characteristic dispositions or traits. The definition offered by Larsen and Buss (2002) makes clear that this conviction of Allport, published nearly three-quarter of a decade ago, has not lost its validity.

Personality Disorders

Essence

PD manifests as problems in cognition (ways of perceiving and thinking about self and others), affect (range, intensity, and appropriateness of emotional response), and behavior (interpersonal functioning, occupational and social functioning, and impulse control). PD is assumed to be

present when the structure of personality prevents the person from achieving adaptive solutions to universal life tasks (Livesly, 1998).

Development of the concept of 'personality disorder'

The systematic description of a PD is not as new as the Diagnostic Statistical Manuel (DSM) or the International Classification of Diseases (ICD) system. It has a long history that goes as far back as the ancient Greeks. Theophrastus, apprentice of Aristoteles, described personality systematically with 30 prototypes, which included personalities like the arrogant man, the stupid man, and the chronic worrier. He based his descriptions on the assumption of a core-element and how this element related to social behavior. Later on, Hippocrates stated that the malfunctioning of body or mind could be related to an imbalance of the four basic components found in the universe, which, according to him, were fire, soil, water and air. He also placed great importance on the four basic fluids in the human body, which he described as yellow and black bile, blood, and phlegm. For instance in this view persons who were prone to aggressive outbursts most likely had an imbalance related to their yellow bile.

During the middle ages, symptoms of psychiatric disorders or otherwise unacceptable social behavior were related to religion and belief. Individual human beings were viewed as either under God's blessing or as possessed by the devil. In the 18th century, the term 'personality disorder' was first used in legal documents, the consequence of which was a more systematic description of behavior. The London Times published in 1895 an article about a woman on trial for murdering her former lover. Apparently, she was agitated and nearly passed out in court, which was described in the article as 'she showed great presence of mind with great propriety'. She was cleared due to insanity.

The 19th century brought a remarkable change in the way people thought about behavior. Previously, it was thought that human behavior was etched in stone by specific internal or external factors. The new view was that behavior was controlled by the individual; in other words, each person chooses his or her actions and reactions in social situations.

This was the beginning of a distinction between PDs (abnormal behavior) and other psychiatric occurrences, meaning insanity or learning disabilities. Pinel (1801) described non-psychotic patients with behavioral problems as 'mani sanas delire'. Koch (1873) described patients who had a socially maladaptive nature in terms of 'psychopatic inferiority'.

The beginning of the 20th century saw more structured and classified diagnoses of psychiatric problems. In 1927, Schneider introduced a classification system which viewed PD as a maladaptive variation of normal personality traits. US Americans developed a new system for classifying PDs, which came to be known as the Diagnostic Statistical Manual (DSM). From 1980 on, the term 'personality disorder' received more explicit attention in the third version of the Diagnostic Statistical Manual (DSM), because of the introduction of the axial system. The second axis offered the possibility to diagnose a patient with a PD. The revised version of the fourth

edition of the DSM (DSM-IV-TR) is currently used in clinical settings. It is expected that the fifth version of the DSM (DSM-5) will be released in 2013.

Classification of personality disorders

The international standard is to diagnose PD based on the DSM-VI-TR or International Classification of Diseases-10 (ICD-10). The categories of PDs have varied origins: psychodynamic theory, apparent similarities between specific PDs and specific mental illnesses, and descriptions of stereotypical personality types.

According to the DSM-IV-TR, the diagnosis of a PD must satisfy the following general criteria in addition to the specific criteria listed under the specific PD.

A. Experience and behavior that deviates markedly from the expectations of the individual's culture. This pattern is manifested in two (or more) of the following areas:1. Cognition (perception and interpretation of self, others and events); 2. Affect (the range, intensity, lability, and appropriateness of emotional response); 3. Interpersonal functioning ; 4. Impulse control.

B. The enduring pattern is inflexible and pervasive across a broad range of personal and social situations.

C. The enduring pattern leads to clinically significant distress or impairment in social, occupational, or other important areas of functioning.

D. The pattern is stable and of long duration, and its onset can be traced back at least to adolescence or early adulthood.

E. The enduring pattern is not better accounted for as a manifestation or consequence of another mental disorder.

F. The enduring pattern is not due to the direct physiological effects of a substance or a general medical condition such as head injury.

The following clusters of PDs are described in the DSM-IV-TR: cluster A: Paranoid PD, Schizoid PD, and Schizotypical PD; cluster B: Narcissistic PD, Histrionic PD, Borderline PD, and Anti-Social PD; cluster C: Dependant PD, Obsessive Compulsive PD, and Avoidant PD. In addition to the above, there is the cluster that is not otherwise specified, which includes two PDs in the appendix described: Depressive PD and Passive- Aggressive PD.

The DSM-IV-TR and the ICD-10 are quite similar to each other with the exception that the Schizotypical and the Narcissistic PD are not classified in the ICD-10 and that there is a distinction made in the ICD-10 between two types of the Emotional Instable PD: the impulsive type and the borderline type.

Dimensional classification

This type of classification presents a variable number of traits as continuous scales. Each person has a particular position on these scales. There are several dimensional systems used

to describe personality, ranging from a two-dimensional approach (interpersonal circumplex) (e.g. Freedman, Leary et al., 1951; Leary, 1957) up to an approach that has seven dimensions (Cloninger, 1993) or even more dimensions, like 16 in the model developed by Cattell (e.g.Cattell, 1970). The most frequent used is the 'Big Five' model of neuroticisme, extraversion, openness, agreeableness and conscientiousness (e.g., Costa & Mc Crea, 1992).

Categorical versus dimensional classification

Categorical thinking is more a psychiatric approach than a psychological approach because in the world of medicine doctors try to categories the situation; is it life-threatening or not, is it abnormal or not. The advantages of this approach are that it quickly turns chaos to order, and that it is easy to conceptualize and communicate, which introduces both familiarity and utility in clinical decision making. A disadvantage is that, where there is a dilemma concerning classification choice, there often is sizeable loss of information (Widiger & Frances, 1994). Another problem with the categorical division of the DSM is the striking heterogeneity of the categories. Each category in the DSM, for instance, describes a group of symptoms. If a patient has a certain number of these symptoms, then he/she can be diagnosed as having that particular illness (monothesis conjunctive). This means, for example, that the Borderline PD is a heterogenic group with 126 different combinations of symptoms.

The dimensional approach is attractive because it still is possible to 'translate' this system into a categorical approach. It speaks for itself that this is not possible the other way around. The dimensional approach gives more information about the individual patient, which means a more realistic understanding of the patient that can be applied in a variety of settings. However, it is important to emphasize that both approaches give important information about the patient and are not incompatible; they are rather complementary. Unfortunately, both models have the problem of reification; they are interpreted as reality. Therefore, there are psychologists (e.g., Mc Adams, 2006) who would like to see a more individual approach in the diagnostic process, not a model, that gives great problems in the clinical practice.

The discussion about whether to diagnose PDs using a categorical or a dimensional model is relevant again with the upcoming release of the DSM 5 (se chapter 10 of this thesis).

Relationship between Axis-1 and Axis-2

In the DSM classification, there is a clear difference between axis-1 and axis-2 and all the different illnesses. In the last decades, it has become increasingly clear that in order to develop an adequate etiologic position and to understand more fully the pathogenesis of mental diseases, the model must be more complex than simply listing separate factors because the illnesses influence each other. The relationship between PD and other mental disorders may be:

1. Mutually exclusive: PD can not be diagnosed in an individual with another mental disorder;
2. Coincidental: PD and another disorder may come together by chance;

3. Associative: the coexistence of PD and another mental disorder is more than coincidental.

The diagnostic process can be made difficult, when other disorders (co-morbidity) are present or have been present. Then, the focus tends to be on the current mental disorder and not on the pattern of behavior. A second problem is that not seldom an axis-1 disorder is misinterpreted as an axis-2 diagnosis and vice versa. The last problem with diagnosis, when co-morbidity is present is that if a patient is diagnosed with a PD, an axis-1 disorder may go undetected or be misconstrued as being part of the PD.

Prevalence of PD

The prevalence of PDs has been the subject of much research that used various subject populations with different study methods. This is why there are vast differences in the results reported about the various populations in the Western world (e.g.,Verheul & Van Den Brink, 1999; Zimmerman, Rothschild & Chelminski,2005). Within the normal population the prevalence ranges from 10% to 14.8%, with a median of 13.5, while an individual would have an average of 1.2 PD. Within the population of psychiatric patients, the prevalence ranges from 45.2% to 80.0% with a median of 60.4%. The average number of PDs per individual is then 2.3. The PDs most commonly diagnosed are Borderline PD with a median of 35.7% and Avoidant PD with a median of 15.4%. Schizoid PD has the lowest prevalence rate with a median of 4.0%.

Diagnostic process of PD

Though it is agreed upon that PDs are associated with the chronic presence of psychological problems (Mulder, 2002), suicidal behavior (Harris & Barraclough, 1997), substance abuse (Brooner, King, Kidorf, Schmidt, & Bigelow, 1997), criminal behavior (Hodgekin, Mednick, Brennan, Schulsinger, & Engberg, 1996), and an increase in health care related expenditures (Rendu, Moran, Patel, Knapp, & Mann, 2002), there is no consensus concerning which approach should be used to diagnose and research PDs. However, there is an ever growing agreement that a clinician's impression and judgment is not sufficient.

In general, clinical diagnosis of PDs has poor reliability (Mellsop, Varghese, Joshua, & Hicks, 1982). While researching possible reasons for this lack of reliability, three aspects were found that seemed to play a major role: (i) variance in information, (ii) variance in observations and interpretation, and (iii) variance concerning criteria (Hodiamont, 1986). With the release of the DSM-III in 1980, the problem with criteria variance was solved. Variance in information, observation and interpretation was greatly reduced, when the (trained) standardized clinical-psychiatric interview was introduced. There are two types of instruments available for diagnosing a PD: the (semi)structured interview and the self-report questionnaire. The (semi) structured interview should be performed by trained professionals to reduce the observational and interpretational variance as much as possible.

There are three methods a clinician can use to diagnose the patient: (i) the non-

standardized clinical interview, (ii) the standardized semi-structured interview, and (iii) the self-report questionnaire. The advantages of self-report are that the information source (patients contemplate and respond to the items themselves) and the standardized scoring. There is no room for interpretation based on the clinician's impressions and no third party influence involved. The non-standardized interview allows the clinician to use any available information, which can be a benefit; however, it does not restrict how the clinician might perceive or value the information during the diagnostic process. Most semi-structured interviews include a description of which information is important and which sources of information should be focused on; however, it remains unclear how active the clinician should be during the interviewing process. There is also a certain type of semi-structured interview in which the information is collected from outside informants (friends and acquaintances of the patient).

The more internationally used semi-structured interviews are the Structured Clinical Interview for DSM-IV Personality Disorders (SCID-II; First, Gibbon, Spitzer, Williams, & Benjamin, 1997), the Standardized Assessment of Personality (SAP; Mann, Jenkins, Cutting, & Cowen, 1981), the International Personality Disorder Examination (IPDE; Loranger et al., 1994), the Diagnostic Interview for Personality Disorders (Zanarini, Frankenburg, Chauncey, & Guberson, 1987), and the Personality Assessment Schedule (PAS; Tyrer et al.,1984).

The two main disadvantages of the semi-structured interview are that the interview is a lengthy process and that a trained professional must conduct the interview. Unfortunately, in daily clinical practice, there often is a lack of personnel and a lack of time for a very extensive diagnostic procedure. A possible solution could be a two-phase procedure: Phase 1 would be the screening phase and Phase 2 would be the administration of a semi-structured interview for those who screened positive. This would save time by not conducting unnecessary interviews.

Screening

At the 1951 Commission on Chronic Illness (CCI) Conference on Preventive Aspects of Chronic Disease, screening was defined as "the presumptive identification of unrecognized disease or defect by the application of tests, examinations or other procedures which can be applied rapidly. Screening tests sort out apparently well persons who probably have a disease from those who probably do not. A screening test is not intended to be diagnostic. Persons with positive or suspicious findings must be referred to their physicians for diagnosis and necessary treatment." Another procedure is, for example, the use of questionnaires. A test may be used diagnostically without it necessarily being intended as a diagnostic instrument. Screening can be done during the early stages of a disease, when, clinically speaking, there are just a few or no symptoms present. Alternatively, screening can be used to detect individuals with certain risk factors.

Wilson and Jungner (1968) described six different screening methods: (i) Mass screening, (ii) selective screening, (iii) multiple or multiphase screening, (iv)surveillance, (v) case finding, and

(vi) population or epidemiological surveys. In general, there are three aspects to screening (in- or out-) patients that are particularly important: First, patients in a particularly high-risk group are likely to yield higher test scores. Second, screening must be useful. If the treatment has few side effects, takes little time and prevents people from the illness, then treatment rather than screening is more useful. The third aspect is cost reduction because of the high costs of hospital care. Screening could save time and money, particularly, when it is done parallel rather than seriatim. It may also be worthwhile to do more tests than necessary to shorten hospital stay.
The Conference on Preventive Aspects of Chronic Disease identified six important aspects of screening: validity, reliability, yield, cost, acceptance, and follow-up services. Validity of a screening test is defined as the measure of the frequency with which the result of that test is confirmed by an acceptable diagnostic procedure. Reliability involves both the variation in methods used and the variation of observers. The yield from screening may be regarded as a measure of previous unrecognized disease diagnosed as the result of screening and brought to treatment. The yield is primarily related to the prevalence of the disease in populations. Also medical care facilities and the efficiency of the screening test itself are important factors in yield. The highest yields from screening will be obtained for a highly prevalent condition in a population where the medical facilities are poor and the test for the condition is efficient.

Because screening can be done quickly and without a specialist, it has various benefits. Early screening could involve multiple tests in one visit to screen for more than one disease. These tests could be done on a regular schedule such as periodic health examination. The low cost of screening and the financial and health benefits of treating patients early make it a practical, painless alternative to semi-structured interviews.

The idea of early disease detection and treatment seems straightforward, but there can be ethical and practical problems. Therefore, Wilson and Jungner (1968) defined ten principles of early disease detection:

1. The condition sought should be an important health problem;
2. There should be an acceptable treatment for patients with recognized disease;
3. Facilities for diagnosis and treatment should be available;
4. There should be a recognizable latent or early symptomatic stage;
5. There should be a suitable test or examination;
6. The test should be acceptable to the population;
7. The natural history of the condition, including development from latent to declared disease, should be adequately understood;
8. There should be an agreed policy on whom to treat as patients;
9. The cost of case finding should be economically balanced in relation to the possible expenditure on medical care as a whole;
10. Case finding should be a continuous process and not a "once and for all" project.

In 2008, Andermann, Blancquart et al. revisited the Wilson and Jungner classic screening criteria because science had developed rapidly and new possibilities existed in the last 40 years, for example, genetic screening.

The new criteria are:

1. The screening programme should respond to a recognized need;
2. The objectives of screening should be defined at the outset;
3. There should be a defined target population;
4. There should be scientific evidence of the screening's programme effectiveness;
5. The programme should integrate education, testing, clinical service and programme management;
6. There should be quality assurance, with mechanism to minimize potential risk of screening;
7. The programme should ensure informed choice, confidentiality and respect for autonomy;
8. The programme should promote equity and access to screening for the entire target population;
9. Programme evaluation should be planned from the outset;
10. The overall benefits of screening should out weight the harm.

Four questions have been suggested to gain insight about whether screening provides more advantages than disadvantages: (i) is the time and energy it will take us to confirm the diagnosis and provide care well spent?; (ii) do the frequency and severity of the target disorder warrant this degree of effort and expenditure?; (iii) does early diagnosis actually lead to improved survival or quality of life or both?; (iv) are the early diagnosed patients willing partners in the treatment strategy? (Sackett et al., 2000).

As previously mentioned, PDs are correlated with chronic psychiatric problems, suicidal tendencies, criminal behavior, substance abuse, and an increase in health care related expenditures. This indicates that it is important and relevant to identify PDs (ad i).

The prevalence of a PD within a population is dependent on psychological and social circumstances in that population. Looking at the psychological risk factors, this is a cumulative effect. Therefore, when people have more than one risk factor, the chance of developing a PD later on increases. It seems that the factors chronicity and intensity are important. PDs have an overall lifetime prevalence of 10-14% with the numbers for women being slightly higher (14.6%) than men (13.7%) (Hellinga, 2002, de Jong, 1999). The prevalence levels between the different clusters of PDs show differences among different studies, which is probably the result of different diagnostic methods. In the general population, 10-14.8% of individuals have one PD. In the psychiatric population, the numbers are significantly higher with 45-80% of patients having at least one PD. The borderline PD is the PD most commonly diagnosed within the psychiatric population. The psychiatric population's looks like this in numbers: 71% of individuals have one PD, 18.6% have two PDs, 5.5 % have three and 2 % have four or more PDs (Torgersen, 2001). There are also other aspects involved: 75% of individuals with a PD have other problems

and axis 1 diagnoses, for example severe depression, or drug abuse (Dolan &Sewell et al 2001) (ad ii).

During recent years, several well documented studies have been conducted that examine the results of the treatment of different PD. Linehan (2006), for instance, was able to show the effects of dialectic behaviour therapy on multiple occasions during the treatment of cluster B PDs. In addition, Moskovitz (2001) and Svartsberg (2004) have shown that there is an adequate treatment for cluster B and cluster C PDs patients. The results showed that treatment of PDs is possible: the patients had better outcome (ad iii). Psycho-education for patients and family members in the treatment programs makes the patient more capable of accomplishing the necessary treatment and that lowers the dropout rate (ad iv).

A PD that is part of a dual diagnosis (axis I as well as II) is not only serious in behavioral terms and use of medication but also it terms of chronicity. Therefore a dual diagnosis poses a great threat to the psychiatric treatment process if the PD is being ignored. (Hodiamont, 1999). An early diagnosis of PD can lead to improved treatment results.

Presentation of the study

Goal of this study

The goal of the thesis was to provide busy clinicians with a powerful screening tool for PDs that is time-saving and easy to administer, but nevertheless as accurate as possible and therefore useable in clinical practice.

Design of the study

The main objectives of this thesis are A) to study the psychometric properties of six international known screening instruments (SCID-II Personality Questionnaire (SCID-II PQ), Standardized Assessment of Personality - Abbreviated Scale (SAPAS; Moran, Leese et al, 2003), Iowa Personality Disorder Screen (IPDS; Langbehn, Pfohl et al, 1999) and Quick Personality Assessment Schedule (PAS-Q; Tyrer, 2000) and the Standardized Assessment of Personality (SAP; Mann et al, 1999) NEO-FFI (Hoekstra, Ormel, & De Fruyt, 2003) and validate these instruments for a Dutch psychiatric outpatient population with the SCID-II as a gold standard, B) to develop a new screening instrument based on the SCID-II, S-SCID-II (Short version of the Structured Clinical Interview for DSM-IV TR Personality Disorders-II) and a informant version of the SAPAS-INF, investigate the psychometric qualities and validate this instrument for a Dutch psychiatric outpatient population.

Different phases of the study

In phase A, we requested permission from the original designers of the international screening-instruments: Standardized Assessment of Personality - Abbreviated Scale (SAPAS; Moran, et

al, 2003), Iowa Personality Disorder Screen (IPDS; Langbehn et al., 1999) and Quick Personality Assessment Schedule (PAS-Q; Tyrer, 2000) and the Standardised Assessment of Personality (SAP; Mann et al., 1999). After translating the instruments into Dutch (translated by the authors of the study), they were translated back into English by the translation centre of the University of Tilburg (UvT). We transformed the SAPAS and the IPDS form a structured interview to a self report version.

In phase B We developed a screening-instrument based on the SCID-II (Short version of the Structured Clinical Interview for DSM-IV TR Personality Disorders-II (S-SCID-II)). We transformed the SAPAS-interview into an interview for informant (SAPAS-INF).

In phase C researchers performed three studies at GGZ Breburg (GGZ Midden Brabant), a Community Mental Health Centre (CMHC) in Tilburg, the Netherlands. These studies were prospective, observational test-development studies with a random sample of the population that seeks help at the GGZ-Breburg. The studies were performed within the team at the GGZ-Breburg where all people who seek help are referred to and was part of the normal intake procedure. The patients were recruited at random. The process of randomization contains one daily blind draw out of the full set of referrals. This was executed by the secretary of the intake desk. After drawing inclusion and exclusion criteria were checked in case of eligibility the invitation letter was send. In case of non-eligibility no second draw was done that day. Criteria for recruitment were to be of Dutch origin and being non-illiterate. All recruited patients gave informed consent prior to participation.

Exclusion criteria were inability to undergo the protocol due to severe mental illness, illiteracy, dyslexia, mental retardation, severe visual or auditive handicaps, cerebral damage, or refusal to participate. The procedure for all three projects was roughly the same.

The first study (I) involves Chapter 2, 3, 4, 5, 7, 8 and was performed from March 2004 to March 2005. The second study (II) was performed from October 2006 to January 2007(Chapter 6) and the third study (III) was performed from January 2008 and October 2009 (Chapter 9).

Objectives of this thesis

Part A: Categorical self-report as screening-instrument

The first chapters focused on the categorical self-report questionnaires and compared these with the SCID-II as gold standard. The psychometric properties and predictive values of the different instruments are described. Chapter two focuses on the SAPAS, while chapter three examines the IPDS. Chapter four looks at the development, the psychometric properties and the predictive values of the short version of the SCID. Chapter five focuses on an independent and separate follow-up study which examines the screening-questionnaire of the SCID-II.

Part B: categorical interview as screening-instrument

This section examines the psychometric properties and predictive values of the categorical interview PAS-Q compared to the SCID-II as gold standard.

Part C: Dimensional self-report as screening-instrument

This section examines the psychometric properties and predictive values of the personality questionnaire NEO-FFI as a dimensional screening-test for PDs compared to the categorical SCID-II as gold standard.

Part D: Hetero-anamnestic screening-instruments

This section examines the psychometric properties as well as predictive values of the internationally known hetero-anamnestic screening-test, the SAP, our own created SAPAS-INF, compared to the SCID-II as gold standard.

Part E: General summery, Discussion and Clinical Implication

In this section the clinical implication will be discussed in chapter 9, chapter 10 is the general discussion with the final conclusion.

Part F: Appendix

All screening-instruments that have been translated into the Dutch language.

REFERENCES

Allport, G.W. (1937). *Personality: A psychological interpretation*. New York, NY±Holt.

American Psychiatric Association (1994). *Diagnostic and Statistical Manual of Mental Disorders* (fourth edition) (DSM-IV). Washington, DC: APA.

Andermann, A., Blancquaert, I., Beauchamp, & S., Déry, V. (2008). Revisiting Wilson and Jungner in the genomic age: a review of screening criteria over the past 40 years. *Bull World Health Organ,86,*317-9.

Brooner, R.K., King, V.L., Kidorf, M., Schmidt, C.W. Jr., & Bigelow, G.E. (1997). Psychiatric and substance use comorbidity among treatment-seeking opioid abusers. *Archives of General Psychiatry 54,*71-80.

Cattell, R.B., Eber, H.W., & Tatsuoka, M.M. (1970). *Handbook for the sixteen personality factor questionnaire*. Champaign, IL: Institute for Personality and Ability Testing.

Cloninger, C.R., Svrakic, D.M., & Przybeck, T.R.(1993). A psychobiological model of temperament and character. *Archives of General Psychiatry 50,*975-990.

Dolan-Sewell, R.T., Krueger, R.F., & Shea, M.T. (2001). Co-occurence with syndrome disorders in Handbook of Personality Disorders: Theory, Research and Treatment Edited by Livesley W.J. New York, Guilford, 84-104.

First, M.B., Spitzer, R.L., Gibbon, M., & Williams, J.B.W. (1995). The Structured Clinical Interview for DSM-III-R personality disorders (SCID-II): part I: Description. *Journal of Personality Disorders, 9,*92-104.

Freedman, M.B., Leary, T.F., Ossorio, A.G., & Coffey, H.S. (1951). The interpersonal dimension of personality. *Journal of Personality 20,*143-61.

Harris, E.C., & Barraclough, B. (1997). Suicide as an outcome for mental disorders. A meta-analysis. *British Journal of Psychiatry 170,*205-28.

Hellinga G. (2002). *Lastige lieden. Een inleiding over persoonlijkheidsstoornissen*. Boom, Amsterdam.

Hodgins, S., Mednick, S.A., Brennan, P.A., Schulsinger, F., & Engberg, M. (1996). Mental disorder and crime. Evidence from a Danish birth cohort. *Archives of General Psychiatry 53,*489-96.

Hodiamont, P.P.G. (1986). Het zoeken van zieke zielen. *Academisch proefschrift. Katholieke Universiteit Nijmegen.*

Hodiamont, P.P.G.(1999). Handboek psychiatrische epidemiologie. In De Jong, A., Van Den Brink, W., Ormel, J., & Wiersma D. P. (eds.) *Comorbiditeit* (pp 84-107). Utrecht: De Tijdstroom.

Hoekstra, H.A., Ormel, J., & De Fruyt. (2003). *NEO-FFI Big Five persoonlijkheidsvragenlijst [NEO-FFI Big Five personality questionnaire]* . Swets & Zeitlinger B.V., Lisse. The Nederlands.

Langbehn, D.R., Pfohl, B.M., Reynolds, S., Clark, L.A., Battaglia, M., Bellodi, L., et al. (1999). The Iowa Personality Disorder Screen: Development and preliminary validation of a brief screening interview. *Journal of Personality Disorders, 13,* 75-89.

Larsen, R.J., & Buss, D.M. (2002). *Personality psychology: Domains of knowledge about human nature*. New York, NY: McGraw-Hill.

Leary, T. (1957). *Interpersonal diagnosis of personality.* New York: Ronald Press.

Linehan, M.M., Comtois, K.A., Murray, A.M., Brown, M.Z., Gallop, R.J., Heard, H.L., Korslund, K.E., Tutek, D.A., Reynolds, S.K., Lindenboim, N. (2006).Two-year randomized controlled trial and follow-up of dialectical behavior therapy vs therapy by experts for suicidal behaviors and borderline personality disorder. *Archives of General Psychiatry*, *63,*757-66.

Livesley, W.J. (1998). Suggestions for a framework for an empirically based classification of personality disorder. *Canadian Journal of Psychiatry 43,*137-47.

Loranger, A.W., Sartonius, N., & Janca, A. (red.) (1996). Assessment and diagnosis of personality disorders: The International personality Disorder Examination (IPDE) Cambridge Press, New York, NY.

Mann, A.H., Jenkins, R., Cutting, J.C., & Cowen, P.J. (1981). The development and use of a standardized assessment of abnormal personality. *Psychological Medicine, 11,* 839-847.

Mann, A.H., Raven, P., Pilgrim, J., Khanna, S., Velayudham, A., Suresh, K.P., et al. (1999). An assessment of the standardised assessment of personality as a screening instrument for the international personality examination: A comparison of informant and patient assessment for personality. *Psychological Medicine, 29,* 985-989.

McAdams, D.P., & Pals, J.L. (2006) A New Big Five. Fundamental Principles for a Integrative Science of Personality. *American Psychologist, 3*, 204-217.

McCrae, R. R., & Costa, P. T., Jr. (1996). Toward a new generation of personality theories: Theoretical contexts for the five-factor model. In J. S. Wiggins (Ed.), *The five-factor model of personality: Theoretical perspectives* (pp. 51-87). New York: Guilford.

Moran, P., Leese, M., Lee, T., Walter, P., Thornicroft, G., & Mann, A. (2003). Standardised Assessment of Personality- Abbreviated Scale (SAPAS): Preliminary validation of a brief screen for personality disorder. *British Journal of Psychiatry, 183*, 228-232.

Moskovitz, R. A.(2001). *Lost in the Mirror: An Inside Look at Borderline Personality Disorder*.

Mulder, R.T. (2002). Alcoholism and personality. *Australian and New Zealand Journal of Psychiatry. 36,* 44-52.

Pilkonis, P., Yookyung K., Proietti J., et al (1996). Scales for personality disorders developedfrom the inventory of interpersonal problems. *Journal of Personality Disorders 10(4),* 355-369.

Rendu, A., Moran, P., Patel, A., Knapp, M., & Mann A.(2002). Economic impact of personality disorders in UK primary care attenders. *British Journal of Psychiatry, 181*, 62-6.

Sackett, D., Strauss, S.E., Richardson, W.S., Rosenberg W., & Hayned R.B. (2000). Evidence Based Medicine: How to practice and teach EBM 2nd edition. (pp 91). Churchill Livingstone.

Semple, D., & Smyth, R. (2009). Oxford handbook of psychiatry 2nd edition. *Personality disorders* (pp 437-455). Oxford new York: Oxford University Press.

Svartberg, M., Stiles, T.C., & Seltzer, M.H. (2004). Randomized, controlled trial of the *effectiveness of short-term dynamic psychotherapy and cognitive therapy for cluster* C personality disorders. *American Journal of Psychiatry; 161*,810-7.

Torgersen, S., Kringlen, E.., & Cramer, V. (2001). The prevalence of personality disorders in a community sample. *Archives of General psychiatry, 58,* 590-596.

Tyrer, P. (2000). Quick Personality assessment Schedule: PAS-Q. In P. Tyrer (eds.), *Personality disorders: diagnosis, management and course* 2nd edition (pp181-190). London: Arnold.

Tyrer, P. (2000). Personality Assessment Schedule: PAS-I (ICD-10 version). In P. Tyrer (eds.), *Personality disorders: diagnosis, management and course* 2nd edition *(*pp 160-180). London: Arnold.

Verheul, R., & van Den Brink, W.(1999). Persoonlijkheidsstoornissen. In De Jong, A., Van Den Brink, W., Ormel, J., & Wiersma, D. P. (eds.), *Handboek psychiatrische epidemiologie.* (pp 347-372). Utrecht: De Tijdstroom.

Widiger, T.A. & Frances, A.J. (1994). Towards a dimensional model for personality disorders. In Costa P.T. & Widiger T.A. (eds.) *Personality disorders and the five-factor model of personality* (pp: 19-39). Washington DC, American Psychological Association.

Wilson, J.M.G., Jungner, G. (1986). *Principles and practice of screening for disease*. Geneva: WHO. World Health Organization.–(1992). *International Classification of Diseases*, Tenth Revision, Geneva,Switzerland: World Health Organization.

Zanarini, M.C, Frankenburg, F.R., Chauncey, D.L.,& Gunderson J.G. (1987). The diagnostic interview for personality disorders: Interrater and test-retest reliability. *Comprehensive Psychiatry 28*: 6: 467-480.

Zimmerman, M., Rothschild, L., & Chelminski, I. (2005). The prevalence of DSM-IV personality disorders in psychiatric outpatients. *American Journal of Psychiatry, 162*, 1911-1918.

PART A

Categorical self-report screening instruments

CHAPTER 2

The Self-Report Standardised Assessment of Personality-Abbreviated Scale (SAPAS-SR): Preliminary results of a brief screening test for personality disorders

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Personality and Mental Health (2008) 2, 70-76

ABSTRACT

Objective: The internal consistency, test-retest reliability, and validity of the Self-Report Standardised Assessment of Personality-Abbreviated Scale (SAPAS-SR) as a screening instrument for Personality Disorders (PDs) were studied in a random sample of 195 Dutch psychiatric outpatients, using the SCID II as a gold standard.

Methode: All patients completed a self report version of the SAPAS. One week later, they were interviewed with the SCID-II. Two weeks later the SAPAS-SR was re-administered.

Results: According to the SCID II, 97 patients (50 percent) were suffering from a Personality Disorder (PD). The SAPAS-SR correctly classified 81 percent of all participants. Sensitivity (0.83) and specificity (0.80) were slightly lower compared with the original English version. This difference may be explained by the lower prevalence and severity of PDs in the study population.

Conclusion: The results provide evidence for the usefulness of the SAPAS as a self administered instrument for screening PDs in clinical populations.

Key words: personality disorders; screening instrument, validity

INTRODUCTION

Since the presence of co-morbid PD can adversely affect the management of mental illnesses (Moran, Walsh et al., 2003; Newton-Howes, Tyere, & Johnson, 2006), assessment of the personality status of patients should be an essential part of every psychiatric examination. Although not perfect (Zimmerman, 1994), a standardized clinical interview is generally considered to be the most reliable and valid method available for the assessment of PDs. However, performing such an interview is quite often very time consuming and can be exhausting for the patient. Self-report questionnaires can be useful research tools, particularly when employed as a part of a two-stage design for case identification (Lenzenweger, Loranger, Korfine, & Neff, 1997). However, self-report questionnaires generally have poor specificity and can also be tiring for patients as they require the ability to concentrate on written questions. A third approach is to conduct a brief structured interview that is incorporated into a standard psychiatric interview. Several short structured interviews have been developed. Van Horn et al. (2000) have developed a structured patient interview for PDs, the Rapid Personality Assessment Schedule (PAS-R). Although the PAS-R performs moderately well as a screening instrument for PD, it requires specific training and can take more than 15 minutes to complete, which is relatively long in comparison with the Iowa Personality Disorder Screen (IPDS) and the Standardised Assessment of Personality - Abbreviated Scale (SAPAS). Langbehn et al. (1999) have developed the Iowa Personality Disorder Screen (IPDS) that consists of items taken from the DSM-III version of the Structured Interview for DSM-III Personality Disorders (SIPD; Stangl, Pfohl, Zimmerman, Bowers, & Corenthal, 1985). The test can be completed within five minutes and was reported to have excellent sensitivity (92%) and good specificity (79%). However, the results should be regarded with caution, as the validation procedure was a somewhat circular exercise, as the IPDS items were derived from the SIPD-R introducing the possibility of unwanted overlap between predictor and criterion variables. Recently, Moran, Leese et al. (2003) published a brief interview for the screening of PD: the Standardised Assessment of Personality - Abbreviated Scale (SAPAS). The SAPAS consists of eight dichotomously rated items, which the original authors had taken from the opening section of an informant-based semi-structured interview, the Standardised Assessment of Personality (SAP; Mann, Jenkins, Cutting, & Cowen, 1981; Mann et al., 1999). Each item is scored 0 (absent) or 1 (present), and the sum of these scores generates the overall score, ranging from 0-8. Moran, Leese, et al. (2003) validated the SAPAS in a sample of 60 adult psychiatric patients, recruited from out-, day- and inpatient units in London, United Kingdom. A member of the clinical team (either a doctor or a nurse) interviewed the patient, using the SAPAS, as part of their routine clinical work. Shortly afterwards, the patient was interviewed with the Structured Clinical Interviews for DSM-IV Personality Disorders (SCID-II; First, Spitzer, Gibbon, & William, 1995) by a researcher. Three weeks later, the SAPAS was repeated in order to determine test-retest reliability. Using a cut-off score of 3, the sensitivity and specificity of the SAPAS were 0.94 and 0.85, respectively, and the positive and negative predictive values were 0.89 and 0.92, respectively. Even short

interviews, however, are interviews, requiring specific clinical training. Therefore, the uptake of the SAPAS might improve, if this screening interview could be administered as a short self-report measure.

Aim of the study

The main objective of this study was to construct a new self report version of the SAPAS and to validate this new instrument, called SAPAS-SR, in a population of Dutch psychiatric outpatients using the SCID-II as the golden standard.

MATERIAL AND METHODS

Participants

The study was performed at GGZ-Midden Brabant, a community mental health centre in the city of Tilburg, the Netherlands, after approval by the National Medical Ethical Committee. All patients that finally participated were of Dutch origin. From the total group of patients (N = 2116) referred to this centre between March 2004 and March 2005, approximately 10 % (N=207) of the outpatients were randomly recruited. Although initially all recruited patients gave informed consent to participate (N=207), 12 patients (5.8 %, 8 men, 4 woman, mean age 33.0 year) did not return after their first assessment and were therefore excluded. The study group (N=195) consisted of 112 women (57.4%) and 83 men (42.6%). The mean age was 32.7 years (s.d.= 8.9). The primary reasons for psychiatric referral were: anxiety problems (n=62; 31.8%), affective problems (n=29; 14.9%), conduct disorders (n=33; 16.9%), partner-relational problems (n=23; 11.8%), somatic problems (n=12; 6.2%), labour or school problems (n=10; 5.1%), identity problems (n=7; 3.6%), social problems (n=4; 2.1%), addiction problems (n=1; 0.5%) and cognitive problems (n=2; 1.0%). No specific psychiatric problem was mentioned by the referring physician in the case of five patients (2.5%).

Measures

The SAPAS-SR

Since no Dutch version of this instrument was available at the time of this study, the original version of the SAPAS was translated into the Dutch language by the authors and translated back into English by the translation centre of Tilburg University (UvT). The result of the latter translation was identical to the original version and was confirmed by one of the developers of the original instrument (P.M.).

SCID-II

The SCID-II (First et al., 1995; Dutch version; Weertman, Arntz, & Kerkhofs, 1997) is a semi-structured interview for the assessment of PDs which covers the ten DSM-IV PDs as well as passive-aggressive and depressive PD, which are both listed in the appendix of the DSM-IV. The SCID II consists of two parts. The first part consists of eight open questions, relating to the patient's general behaviour, interpersonal relationships and self-reflective abilities of the patient. The second part consists of 140 items that are scored as 1 (absent), 2 (sub-threshold), or 3 (threshold). The SCID II is primarily designed to make a categorical diagnosis of PD. The interrater reliability and internal consistency of the SCID-II are adequate (Maffei et al., 1997; Westen, Shelden, 1999). The interrater reliability for the presence or absence of any PD of the most recent Dutch version has been reported to be fair to good (Weertman, Arntz, Dreessen, Van Velzen, & Vertommen, 2003). Before undertaking fieldwork for this study, the first author (S.G.) was formally trained in the use of the SCID-II.

Procedure

The SAPAS was completed as a self-report questionnaire at the initial clinical appointment. The researcher (S.G.) who conducted the SCID-II interview was blind to the results of the SAPAS. The SCID-II interview, was conducted one week after the SAPAS-SR. The SAPAS-SR was repeated two weeks after the initial SAPAS-SR assessment.

Analysis

All statistical analyses were performed with SPSS version 12 (SPSS Inc., Chicago, IL). The internal consistency of the SAPAS-SR was examined by calculating Cronbach's alpha. The test-retest reliability of each item and the overall score were estimated with correlation coefficients. Furthermore, the dimensionality of the SAPAS-SR was examined using factor analysis. The effect of changing cut-off scores on the SAPAS-SR in predicting a SCID-II (DSM-IV) diagnosis of PD was examined using a receiving operating characteristic (ROC) analysis. To assess the sensitivity and specificity of various cut off scores, a sensitivity and specificity plot was constructed.

RESULTS

Ninety-seven of the 195 patients received a SCID-II diagnosis, yielding a prevalence of PDs of 50%. The mean number of PD diagnoses among those with any PD was 1.8 (s.d.= 0.87).

Table 1 shows the Cronbach alpha coefficients, the test-retest outcomes, the phi coefficients for binary data, and the corrected item-total correlation coefficients of the SAPAS-SR items. The test-retest coefficient for the total score is 0.89. The Phi coefficient for binary data total (with a cut-off score of 4) was 1.00. The overall consistency was 0.45. The internal consistency coefficients were rather low, ranging from 0.35 to 0.51. Test-retest reliability of items was, however, reasonable,

with the items 'Are you normally an impulsive sort of person?' and 'In general, do you have difficulty making and keeping friends?' showing the lowest, and the item 'In general, are you a perfectionist?' the highest stability across time.

Table 1 *Internal consistency, test-retest, phi, and corrected item-total correlation coefficients for items of the Self Report Standardised Assessment of Personality-Abbreviated Scale (SAPAS-SR)*

Item	Internal consistency*	Test-retest correlation coefficients	Phi coefficients for binary data	Corrected item-total correlation coefficients
In general, do you have difficulty making and keeping friends?	0.41	0.77	0.87	0.22
Would you normally describe yourself as a loner?	0.39	0.89	0.99	0.26
In general, do you trust other people?	0.35	0.79	0.89	0.35
Do you normally lose your temper easily?	0.38	0,78	0.87	0.28
Are you normally an impulsive sort of person?	0.51	0.72	0.82	-0.03
Are you normally a worrier?	0.41	0.81	0.91	0.22
In general, do you depend on others a lot?	0.41	0.84	0.94	0.23
In general, are you a perfectionist?	0.47	0.90	1.00	0.09

Note: * alpha coefficient if item is deleted.

The rather low alpha coefficients suggested heterogeneity of the items and, therefore, a factor analysis was performed. Principal components extraction with oblimin rotation was performed on the eight SAPAS-SR items. Three factors were extracted based on the criterion of eigenvalues greater than 1.0 (eigenvalues: 1.84, 1.26, 1.20, 0.92, 0.86, 0.69, 0.65, 0.57) and inspection of the Scree test (Figure 1, Cattell, 1996).

The pattern matrix of unique relationships between each factor and each observed variable, uncontaminated by overlap among factors, revealed a clustering of the eight items in three groups, reflecting the heterogeneity of items. Intercorrelations among the components ranged from 0.05 (F_2 with F_3) to 0.12 (F_1 with F_2). The three factors explained 53.8 % of the total variance. The loadings of the variables on the factors are shown in Table 2.

Figure 1 *Scree-plot the Self Report Standardised Assessment of Personality-Abbreviated Scale (SAPAS-SR)*

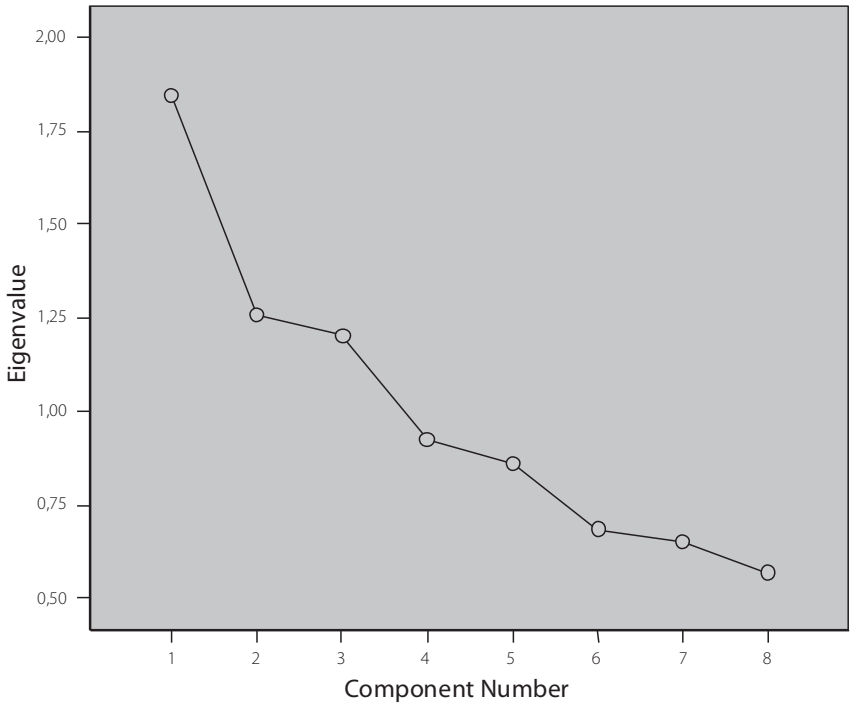


Table 2 *Factor loadings for principal components extraction (pattern matrix) and oblimin rotation on the Self Report Standardised Assessment of Personality-Abbreviated Scale (SAPAS-SR)*

Item SAPAS	Factors		
	1	2	3
1 In general, do you have difficulty making and keeping friends? [*yes*=1; *no*=0]	**0.79**	-0.05	-0.09
2 Would you normally describe yourself as a loner? [*yes*=1; *no*=0]	**0.72**	0.02	0.07
4 Do you normally lose your temper easily [*yes*=1; *no*=0]	0.30	**0.64**	0.03
5 Are you normally an impulsive sort of person? [*yes*=1; *no*=0]	-0.33	**0.67**	-0.16
3 In general, do you trust other people? [*yes* =0; *no*=1]	0.44	**0.51**	0.06
8 In general, are you a perfectionist? [*yes*=1; *no*=0]	-0.08	-0.13	**0.71**
7 In general, do you depend on others a lot? [*yes*=1; *no*=0]	0.17	-0.10	**0.66**
6 Are you normally a worrier? [*yes*=1; *no*=0]	0.15	0.41	**0.62**

Note: factor loadings > +/- 0.30 are presented in bold.
Factor loadings of factors belonging to each of the three factors are presented in bold.

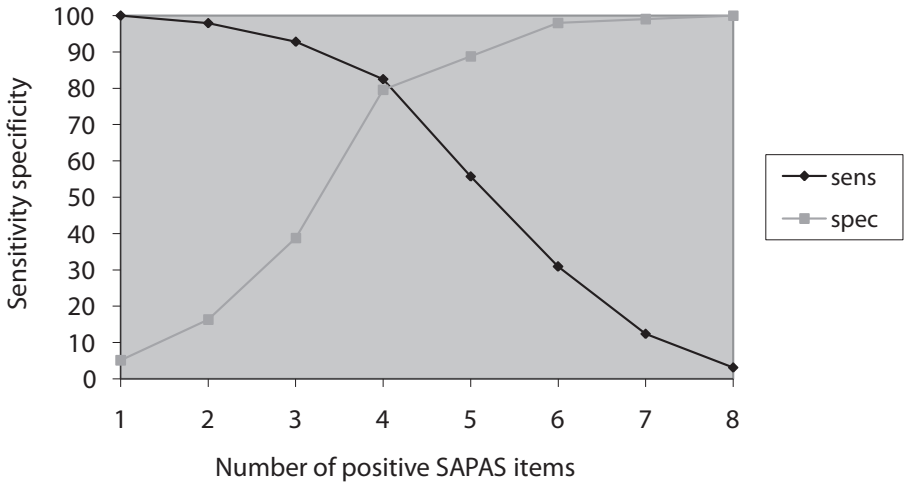
The effect of changing cut-off scores on the SAPAS-SR in predicting a SCID-II (DSM-IV) diagnosis of PD was examined using a Receiver Operating Characteristic (ROC) analysis. The ROC-curve had an Area-Under-the Curve (AUC) of 0.84 (95% CI: 0.78-0.90). The performance of the SAPAS-SR at different cut-off scores was assessed by references to the sensitivity, specificity and predictive values (Table 3).

Table 3 *Sensitivity, specificity and the power to predict personality disorder at different cut- off scores of the Self Report Standardised Assessment of Personality-Abbreviated Scale (SAPAS-SR)*

SAPAS cut-off score	Sensitivity	Specificity	Positive predictive value	Negative predictive value	Correctly classified (%)
2	97.9	16.3	53.7	88.9	56.9
3	92.8	38.8	60.0	84.4	65.6
4	82.5	79.6	80.0	82.1	81.0
5	55.7	88.8	83.1	66.9	72.3
6	30.9	98.0	93.8	58.9	64.0

To assess the sensitivity and specificity of various cut off scores, a sensitivity and specificity plot was constructed (Figure 2).

Figure 2 *Sensitivity –specificity plot relating Structured Clinical Interview for DSM-IV Personality disorders positive diagnosis to total score on the Self Report Standardised Assessment of Personality-Abbreviated Scale (SAPAS-SR)*



This plot revealed that the optimal SAPAS-SR-cut-off score for a SCID-II based diagnosis of PD was 4. A cut-off score of 4 not only correctly classified 81 % of the patients; it also resulted in the best balance of sensitivity (0.83) and specificity (0.80).

DISCUSSION

Performance of the SAPAS-SR

The SAPAS has previously been shown to be a reliable and valid mini-interview. This study provides preliminary evidence to demonstrate the usefulness of the SAPAS when it is administered as a self-report questionnaire for PD in routine clinical settings. A score of 4 or more on the SAPAS-SR correctly identified the presence of PD in 81 % of cases. This threshold score of 4 is different from the threshold score of 3, suggested for the original SAPAS (Moran et al, 2003). A plausible reason could be the fact that in the original study the sample that was studied consisted of patients that already had entered therapy. Future research should examine whether this is the major reason for the discrepancy in cut-off points or other factors like, for instance the role of social desirability in self-report play a substantial role. The heterogeneity of the phenomena at hand would not suggest high alpha coefficients. This was confirmed in the study of Moran et al (2003). In the present study, the corresponding internal consistency coefficients were even slightly lower. However, low overall consistency should not be interpreted as an indication that the SAPAS-SR is a poorly performing test. The low homogeneity of the eight items suggests that this particular set of items may have several latent attributes. The lack of interrelatedness of the items suggests that the content of the SAPAS-SR is multifaceted and this in turn, is likely to reflect the heterogeneous content of the concept 'personality disorder'. The fact that the SAPAS-SR is not a unidimensional instrument that measures only one concept with a strong internal structure is also supported by the outcomes of the factor analysis, that identified three factors. It is quite remarkable that these factors approximate fairly well to the three clusters of PD (A,B and C). This outcome points at the content validity of the SAPAS-SR.

The findings should be interpreted in the light of a number of limitations.

First, because of the dependence on disease prevalence, screening for disease in low-prevalence populations yields few positive test results (Gray, 2002). While the prevalence of PDs in the present sample of psychiatric patients was 50%, this prevalence will undoubtedly be much lower in the general population, yielding a lower positive predictive value for the SAPAS-SR in this setting and remains to be seen how well the SAPAS-SR performs in community samples. Second, the use of the SCID-II as the criterion in this study can be questioned. However, the SCID-II is widely used across the world and its properties are well established.

Third, we have transformed the SAPAS structured mini interview into a self-report questionnaire. This implies the introduction of an extra source of variance. Discrepancies between methods might explain some of the differences in results between this present study and that of Moran, Leese et al. (2003). Finally, it should be emphasized that the present sample was recruited from newly referred outpatients and did not contain day-care of clinical admitted patients. As a consequence, this sample had a lower degree of co-morbidity compared with the sample that was studied in Moran et al.'s original study. It can be assumed that higher co-morbidity of PDs will contribute to the interrelatedness of the items of the SAPAS-SR.

Potential applications of the SAPAS-SR

The SAPAS-SR could be used to identify individuals at risk for having any type of PD in the context of general adult psychiatry. The test itself is, by definition, not suited for making clinical diagnoses of PD. Use of the SAPAS-SR does not imply that the judgement of the individual patient is in some sense more valid than the judgement of the professional. However, it could be successfully used as a first step in a two-stage procedure for case identification. Patients with a score of 4 or more on the SAPAS-SR should be interviewed with a detailed (semi) structured interview for PDs.

Although the SAPAS-SR in its present form was not successful in identifying all cases, an ideal situation that is far from realisation, the obtained outcomes are promising and allow optimism regarding the effective use in clinical and research settings.

REFERENCES

American Psychiatric Association (1994). *Diagnostic and Statistical Manual of Mental Disorders* (fourth edition) (DSM-IV). Washington, DC: APA.

Cattell, R.B. (1966). The Scree test for the number of items. *Multivariate Behavioral Research, 1*, 140-161.

First, M.B., Spitzer, R.L., Gibbon, M., & Williams, J.B.W. (1995). The structured clinical interview for DSM-III-R personality disorders (SCID-II): part I: Description. *Journal of Personality Disorders, 9*, 92-104.

Gray, G.E. (2002). Evidence-based medicine: An introduction for psychiatrists. *Journal of Psychiatric Practice, 8,* 5-13.

Langbehn, D.R., Pfohl, B.M., Reynolds, S., Clark, L.A., Battaglia, M., Bellodi, L., et al. (1999). The Iowa Personality Disorder Screen: Development and preliminary validation of a brief screening interview. *Journal of Personality Disorders, 13,* 75-89.

Lenzenweger, M.F., Loranger, A.W., Korfine, L., & Neff, C. (1997). Detecting personality disorders in a nonclinical population. Application of a 2-stage procedure for case identification. *Archives of General Psychiatry, 54*, 345-351.

Maffei, C., Fossati, A., Agostoni, I., Barraco, A., Bagnato, M., Deborah, D., et al. (1997). Interrater reliability and internal consistency of the structured clinical interview for DSM IV axis II personality disorder (SCID II) version 2.0. *Journal of Personality Disorders, 11,* 85-92.

Mann, A.H., Jenkins, R., Cutting, J.C., & Cowen, P.J. (1981). The development and use of a standardized assessment of abnormal personality. *Psychological Medicine*, *11,* 839-847.

Mann, A.H., Raven, P., Pilgrim, J., Khanna, S., Velayudham, A., Suresh, K.P., et al. (1999). An assessment of the standardised assessment of personality as a screening instrument for the international personality examination: A comparison of informant and patient assessment for personality. *Psychological Medicine, 29,* 985-989.

Moran, P., Leese, M., Lee, T., Walter, P., Thornicroft, G., & Mann, A. (2003). Standardised Assessment of Personality- Abbreviated Scale (SAPAS): Preliminary validation of a brief screen for personality disorder. *British Journal of Psychiatry, 183*, 228-232.

Moran, P., Walsh, E., Tyrer, P., Burns, T., Creed, F., & Fahy, T. (2003). The impact of co-morbid personality disorder on violence in psychosis – data from the UK700 trial. *British Journal of Psychiatry, 182,* 129-134.

Newton-Howes, G., Tyrer, P., & Johnson, T. (2006). Personality disorder and the outcome of depression: Meta-analysis of published studies. *British Journal of Psychiatry, 188,* 13-20.

Stangl, D., Pfohl, B., Zimmerman, M., Bowers, W., & Corenthal, C. (1985). A structured interview for the DSM-III personality disorders. *Archives of General Psychiatry, 42*, 591-596.

Van Horn, E., Manley, C., Leddy, D., Cicchetti, D., & Tyrer, P. (2000). Problems in developing an instrument for the rapid assessment of personality status. *European Psychiatry, 15* (suppl. 1), 29-33.

Weertman, A., Arntz, A., Dreessen, L., van Velzen, C., & Vertommen, S. (2003). Short-interval test-retest interrater reliability of the Dutch version of the Structured Clinical Interview for DSM-IV personality disorders (SCID-II). *Journal of Personality Disorders*, *17,* 562-567.

Weertman, A., Arntz, A., & Kerkhofs, M.L.M. (1997). Gestructureerd Klinisch Interview voor de DSM-III Persoonlijkheidsstoornissen [Structured Clinical Interview for the DSM-III personality disorders]. *Swets Test Publisher,* 5-15.

Westen, D., & Shelder, J. (1999a). Revising and assessing Axis II, Part I: Development of a clinically and empirically valid assessment method. *American Journal of Psychiatry, 156*, 258-272.

Westen, D., & Shelder, J. (1999b). Revising and assessing Axis II, Part II: Toward an empirically based and clinically useful classification of personality disorders. *American Journal of Psychiatry, 156*, 273-285.

Zimmerman, M. (1994). Diagnosing personality disorders: A review of issues and research methods. *Archives of General Psychiatry, 51*, 225-245.

CHAPTER 3

The Iowa Personality Disorder Screen (IPDS): Preliminary results of the validation of a self-administered version in a Dutch population

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European Journal of Psychological Assessment (2010), 26(1), 11-18.

ABSTRACT

The internal consistency, test-retest reliability, and predictive validity of the Iowa Personality Disorder Screen (IPDS) as a screening instrument for personality disorders (PDs) were studied in 195 Dutch psychiatric outpatients, using the SCID-II as the gold standard. All patients completed a self-administered version of the IPDS. Internal consistency was moderate (0.64), and the test-retest reliability was good (0.87). According to the SCID-II, 97 patients (50 percent) had at least one personality disorder (PD). The IPDS correctly classified 81.0 percent of all participants in the category PD Present/Absent. The sensitivity and specificity were 77% and 88%, respectively. Positive and negative predictive values were 83% and 79%. Test-retest reliability after a 2-week interval was 0.87. These results are comparable with those reported in earlier studies with respect to the interview-version of the IPDS and more promising than previously reported results obtained with a self-report version of the IPDS. Therefore, it is concluded that a self-report version of the IPDS may be useful as a screening measure for determining the presence/absence of PD in a population of psychiatric outpatients.

Keywords: personality disorders; screening instrument, psychometrics, reliability, validity

INTRODUCTION

Personality disorders (PDs) are not only regarded to adversely affect the outcome of mental illnesses, but also considered an important factor in the choice of the treatment (Moran et al., 2003b; Newton-Howes, Tyrer, & Johnson, 2006). For this reason assessment of the personality status should be part of each initial psychiatric examination. Standardized clinical interviews, although not perfect (Zimmerman, 1994), are generally considered to be the most reliable and valid methods for the assessment of PDs. However, such interviews, being either non-structured or semi-structured, are rather time consuming. Furthermore, they can only be applied by specially trained personnel, resulting in a major impact on human and financial resources. Therefore, it is not always feasible to integrate standardized clinical interviews in routine examinations.

Short structured interviews are less time consuming, but may nevertheless render acceptable sensitivity and specificity. Therefore, they may be useful screening instruments in initial psychiatric examinations. Examples of such structured interviews are the Rapid Personality Assessment Schedule (PAS-R; Van Horn, Manley, Leddy, Cicchetti, & Tyrer, 2000), the Standardised Assessment of Personality-Abbreviated Scale (SAPAS; Moran et al., 2003a), and the Iowa Personality Disorder Screen (IPDS; Langbehn et al., 1999).

As part of a larger project aimed at analysing the effectivity of a wide set of screening instruments, the present article focuses on the IPDS. The IPDS consists of the selection of 11 items originally derived from the DSM-III version of the Structured Interview for DSM-III Personality Disorders (SIPD; Pfohl, Blum, Zimmerman, & Stangl, 1989; Stangl, Pfohl, Zimmerman, Bowers, & Corenthal, 1985). These items correspond to specific DSM symptoms of various PD diagnoses. The original selection of these items was completely empirical, the goal being to identify a small subset of the overall SIDP that effectively screened for the presence or absence of *any* PD (regardless of specific type), as judged by results of the full SIDP administration (Langbehn et al., 1999). The original data were a pool of 1203 SIDP results collected at six different sites in the USA, Italy, and Canada. Within each site, the data had been collected for a variety of research and clinical purposes. Despite the ad hoc nature of the data pool, it was the largest available source of SIDP results at the time the instrument was developed. Items were selected using variable selection methods specifically designed for equally weighted responses when the true basis of classification is not necessarily unidimensional (i.e., may consist of more than one latent dimension of personality pathology) (Langbehn & Woolson, 1997). Subsequently, the IPDS was validated in a group of 52 non-psychotic in- and outpatients and the outcome was compared with diagnoses based on the complete SIPD-IV. The structured interview SIPD-IV is the most recent version of the SIPD and measures DSM-IV personality (Pfohl, Blum, & Zimmerman, 1997).

Validation was analysed in terms of sensitivity, specificity, and predictive values. Sensitivity refers to the proportion of true positives that are correctly identified by the test. Specificity is the proportion of true negatives that are correctly identified by the test. Positive and negative predictive values (PPV and NPV) are not intrinsic to the test but depend also on the prevalence

of the disorders. The PPV reflects the probability that a positive test result reflects the underlying condition being tested for. The NPV refers to the chance that a negative test result will be correct. In the original publication (Langbehn et al., 1999), the authors did not report the sensitivity, specificity and predictive values of the IPDS as a whole. Instead, these values were reported for each individual item. Moreover, optimal cut-off scores for specific subsets of items were presented; for instance, a subset of 6 a priori items was proposed as an overall screen. In doing so, the authors showed that the sensitivity, specificity and predictive values differed considerably for specific subsets of items. Excellent sensitivity (92%) and good specificity (79%) were reached with the IPDS items 4-8, whereas a subset consisting of the items 1, and 3-8 (i.e., all items that individually showed evidence of discriminability), showed a sensitivity and a specificity of 79% and 86%, respectively. Because of these promising results Langbehn et al. (1999) advised further experimentation with all 11 items of the IPDS. The use of the IPDS-interview as a primary screening instrument was also studied by Trull and Amdur (2001) in a sample of 103 non-clinical students. They reported 53% sensitivity and 97% specificity for the items 1- 6, whereas the items 1 and 3-8 resulted in a sensitivity of 84% and a specificity of 69%.

Speed is a major advantage of the IPDS. While the IPDS' capacity to detect PDs equals more elaborate tests, its application takes only five minutes. Nevertheless, although its application requires no specific training, the IPDS, like other structured interviews, does require the employment of an interviewer. This disadvantage could be overcome by transformation of the IPDS into a self-administered questionnaire, particularly as part of a 2-stage procedure for case identification, consisting of a case detecting procedure followed by a case identification procedure (Lenzenweger, Loranger, Korfine, & Neff, 1997; Mann et al., 1999). PD diagnosis requires considerable clinical sophistication and it is expensive to deploy clinicians (Lenzenweger et al., 1997). Therefore, in such a 2-stage method, only persons who are screened as positive for PD by trained laypersons or via self-reports will be interviewed by clinicians.

In order to enhance the practicability of the IPDS as a screening instrument, a self-administrable version was developed. Morse and Pilkonis (2007) were the first who examined the utility of such a self-report version using the SIPD-IV as reference. They concluded that their self-report version was quite satisfactory in both psychiatric and non-psychiatric samples. For instance, for a subset of IPDS items (Item 1-6) sensitivity and specificity were 0.97 and 0.46, respectively, with a positive predictive value of 0.90 and a negative predictive value of 0.71. However, it should be mentioned that in this particular study the gold standard was the SIPD-IV, whereas the IPDS was originally derived from an earlier version of the SIDP. Since the use of a more independent reference would render more reliable conclusions about the utility of a self-administered IPDS, we used the SCID-II to study the psychometric qualities of the current 11-item self-report version of the IPDS in a group of Dutch psychiatric outpatients. Furthermore, the influence of different subsets of IPDS-items on sensitivity, specificity and the predictive values was investigated.

MATERIALS AND METHODS

Study site, recruitment, and participants

This study was performed at GGZ Midden-Brabant, a Community Mental Health Centre (CMHC) in Tilburg, the Netherlands. The study was approved by the Regional Medical Ethical Committee. From all patients referred to this CMHC between March 2004 and March 2005 (n = 2116), 207 patients were randomly recruited. Only non-illiterate patients of Dutch origin were included. Informed consent was given by all recruited patients. Twelve patients [5.8 %, 8 men and 4 women, Mean age = 33.0 years] had to be excluded because they did not return after their first assessment. As a result, the study group consisted of 195 patients [112 women (57.4%) and 83 men (42.6%), Mean age = 32.7 years (SD = 8.9)]. The primary reasons for psychiatric referral of the patients in the study group were anxiety problems [n = 62 (31.8%); Mean age = 31.8 (SD = 10.6); 33 women, 29 men], affective problems [n = 29 (14.9%); Mean age = 34.3 (SD = 8.9); 22 women, 7 men], conduct disorders [n = 33 (16.9%); Mean age = 30.3 (SD = 8.7); 11 women, 22 men], partner-relational problems [n = 23 (11.8%); Mean age = 35.1 (SD = 8.2); 17 women, 6 men], somatic problems [n = 12 (6.2%); Mean age = 37.0 (SD = 10.6); 9 women, 3 men], occupational or school problems [n = 10 (5.1%); Mean age = 37.0 (SD = 8.9); 3 women, 7 men], identity problems [n = 7 (3.6%); Mean age = 30.5 (SD = 11.4); 4 women, 3 men], problems related to the social environment [n = 4 (2.1%); Mean age = 30.7 (SD = 5.5); 2 women, 2 men], addiction problems [n=1 (0.5%); age = 30.6; 1 woman], and cognitive problems [n = 2 (1.0%); Mean age = 23.2 ; SD = 2.7; 1 woman, 1 men]. Regarding five patients [2.5%; Mean age = 34.2 (SD = 10.0); 2 women, 3 men], the referring physician had not mentioned any specific psychiatric problem. Some participants reported a history of psychiatric hospitalisation (n = 17; 8.7%) or outpatient treatment (n = 84; 43.1%).

Instruments

The 11-item IPDS is a structured interview for the assessment of PDs derived from the SIPD-R (Pfohl et al., 1989; Stangl et al.,1985). Each IPDS-item is evaluated with only one or two questions (in total: 19 questions). For each item a dichotomous score (0 or 1) is reached by the answers to these question(s). In case of items containing two questions, the item is scored 1 when both questions are answered with 'Yes'. Consequently, the sum of the item scores results in the overall IPDS score, ranging from 0 to 11.

The original version of the IPDS (Langbehn et al., 1999) was translated into Dutch by the present authors. Since the back-translation by the Translation Centre of Tilburg University closely resembled the original English version, the Dutch version was accepted. Adaptation of the IPDS into a self-administered questionnaire did not require a special procedure. Instead of putting the questions orally, as in the conventional IPDS-setting, these questions were presented to the patient in print with a 'yes' or 'no' response scale.

We used the validated Dutch version of the SCID-II (First, Spitzer, Gibbon., & Williams, 1995;

Dutch version by Weertman, Arntz, & Kerkhofs, 1997; Weertman, Arntz, Dreessen, Van Velzen, & Vertommen, 2003) as gold standard. The SCID-II is a semi-structured interview for the assessment of PDs. It covers all PDs of the DSM-IV TR (American Psychiatric Association, 2000) as well as the passive-aggressive and depressive PDs, listed in its appendix. The SCID-II was primarily designed for the categorical diagnosis of PD. It consists of eight open-ended questions regarding the patient's general behaviour, interpersonal relationships, and self-reflective abilities, followed by 140 structured questions. The latter are scored as 1 (*absent*), 2 (*sub-threshold*), or 3 (*threshold*), based on the answers given by the patient as well as additional verbal and non-verbal information available to the interviewer as a result of an interview with open-ended questions. Since specific training is mandatory for SCID-II interviewers, the first author (S.G.) was formally trained prior to this study.

Procedure

At the initial clinical consultation each recruited patient completed the self-report version of the IPDS. One week later each patient underwent the SCID-II interview by one of the authors (S.G.). At the time the SCID-II was performed, the interviewer had no knowledge of the patient's previous IPDS score. After another week, the IPDS self-report questionnaire was administered again to determine the test-retest reliability.

Statistics and Analyses

All data were analysed using the Statistical Package for Social Sciences (SPSS 12, SPSS Inc., Chicago, IL). Test-retest reliability at the level of the total IPDS-score was determined with a Pearson correlation coefficient. Test-retest reliability of the separate items was determined using Phi coefficients for binary data. Values of Phi of 0.75 or higher signify a good reliability, while values ranging from 0.40 to 0.75 can be labelled 'fair'. Any value of Phi less than 0.40 may be taken to indicate no more than a trivial association (Fleiss, 1981). Internal consistency was examined using Cronbach's alpha coefficients (Cronbach, 1951). Cronbach's alphas will generally increase when the correlations between the items of a scale increase (Schmitt, 1996). As a rule of thumb, usually a reliability of 0.70 or higher is required (e.g., Nunnaly, 1978). According to Bland and Altman (1997), coefficients of 0.70 to 0.80 can be conceived of as satisfactory. The guidelines outlined by Cicchetti (1994) are good criteria to determine the clinical significance: alpha values should be interpreted as poor (< 0.70), fair (0.70 to 0.79), good (0.80 to 0.89), or excellent (> 0.90). However, one should keep in mind that the appropriate degree of reliability also depends upon the intended use. An assessment instrument designed for screening purposes is intentionally constructed as a short instrument, at the cost of a somewhat lower reliability, as Cronbach's alpha is not only dependent on the magnitude of the correlations among items, but also on the number of items of the scale (Schmitt, 1996; Streiner & Norman, 1989). In that light, we propose a somewhat more lenient approach, in which coefficients exceeding 0.60 are considered

satisfactory. This more lenient evaluation, however, should not close our eyes for the fact that it remains true that such measures with a short test length have rather low reliability, and that therefore estimates of relationships with other variables will be correspondingly attenuated (Schmitt, 1996).

The heterogeneity of the IPDS-items was evaluated using a Principal Components Analysis (PCA) with Oblimin rotation. Due to the fact that the frequency and/or rarity with which items are endorsed, can confound the magnitude of loadings, the number of substantial factors, and, to some extent, also the apparent grouping of variables into factors, the PCA was performed on a matrix of tetrachoric correlations. Tetrachoric correlations are used when both items are dichotomies which are assumed to represent underlying bivariate normal distributions (Drasgow, 1988). Tetrachoric correlations were estimated with the TetMat program (Uebersax, 2007), using the *Applied Statistics* algorithm AS 116 (Brown, 1977). Receiver Operating Characteristic (ROC) analysis was used to study the effect of the cut-off level of the IPDS-score on the predictive values for the presence of a PD as diagnosed with the SCID-II. The ROC analysis relies heavily on sensitivity and specificity values and is a widespread method for examining the overall performance of a test (Hanley, 1989). Each point on the curve corresponds to a specific pair of sensitivity and specificity. Inspection of the curve will be useful for finding an optimal cut-off value for use in decision-making. The total area under the ROC-curve is a measure of the performance of the diagnostic instrument since it reflects the test performance at all possible cut-off levels (Westin, 2001).

RESULTS

According to the SCID-II, at least one PD was present in 97 (50%) of the 195 participants. The mean number of PDs in patients diagnosed with any PD was 1.8 (SD= 0.87). Therefore, the overall total of SCID-II diagnoses was 172. Table 1 illustrates the number of patients with a particular PD, according to the SCID-II and the IPDS.

For the total IPDS-score across all 11 items, the test-retest correlation coefficient was 0.87. The test-retest correlation coefficient for the individual items varied from 0.67, for the item 'Lack of stable self-image' and 'Insensitive to the concern and needs of others' (items 7 and 11, respectively) to 1.00 for the item 'Excessive social anxiety' (item 5) (Table 2). The overall internal consistency for the total set of 11 items was 0.64. 'Expected to be exploited or harmed by others' (item 9) provided the highest contribution to the internal consistency (Cronbach's alpha if item is deleted = 0.59), whereas 'Feels uncomfortable in situations where he/she is not the centre of attention' and the item 'Insensitive to the concerns and needs of others' (items 2 and 11, respectively) contributed the least to the internal consistency (Cronbach's alpha if item is deleted = 0.64).

Table 1 *Number of patients with one or more PDs, according to the SCID-II and the IPDS*

Personality disorders		SCID-II	IPDS	
		N	Hit N (%)	No-Hit N (%)
Cluster A				
	Paranoid	6	6(100%)	0(0%)
	Schizotypal	1	0(0%)	1(100%)
	Schizoid	1	0(0%)	1(100%)
	Total Cluster A	8	6(75%)	2(25%)
Cluster B				
	Histrionic	4	4(100%)	0(0%)
	Narcissistic	15	13(86.7%)	2(13.3%)
	Borderline	44	36(81.8%)	8(18.2%)
	Antisocial	20	15(75%)	5(25%)
	Total Cluster B	83	68(81.9%)	15(18.1%)
Cluster C				
	Avoidant	27	22(81.5%)	5(18.5%)
	Dependent	14	10(71.4%)	4(28.6%)
	Obsessive-compulsive	21	15(71.4%)	6(28.6%)
	Total Cluster C	62	47(75.8%)	15(24.2%)
N.A.O.				
	Passive-aggressive	9	8(88.9%)	1(11.1%)
	Depressive	10	9(90.0%)	1(10.0%)
	Total N.A.O.	19	17(89.5%)	2(10.5%)
Overall total		172	138(80.2%)	34(19.8%)

Note: N = number of patients. Hit = true positive; No-Hit = false negative. If a patient meets the SCID-II criteria for more than one personality disorder, then he/she is listed for all diagnosed personality disorders.

Frequency of item endorsement ranged from 6.2%, for item 2, to 51.3% for item 10, with an average percentage of 30.4% (Table 2).

Table 2 *Item endorsement, internal consistency, test-retest, Phi, and corrected item-total correlation coefficients for the items of the Iowa Personality Disorder Screen (IPDS)*

Item	Frequency (%) of item endorsement	Internal consistency*	Test-retest Phi coefficients for binary data	Corrected item-total correlation
1.Experiences marked shifts in mood	41.0	0.61	0.98	0.31
2.Feels uncomfortable in situations where he/she is not the centre of attention	6.2	0.64	0.81	0.12
3.Actions usually directed towards obtaining immediate satisfaction	20.0	0.62	0.86	0.28
4.Is reluctant to confide in others because of unwarranted fear that information will be used against him or her	44.1	0.63	0.91	0.27
5.Excessive social anxiety, e.g., extreme discomfort in social situations involving unfamiliar people	33.8	0.61	1.00	0.34
6.Unwilling to get involved with people unless certain of being liked such that the number of friends has been limited	23.6	0.61	0.95	0.33
7.Lack of stable self-image	24.1	0.63	0.79	0.26
8.Prone to discuss and overemphasize importance of own achievements and why he/she should be considered a special case	31.8	0.60	0.82	0.40
9.Expected to be exploited or harmed by others	29.2	0.59	0.80	0.43
10.Bears grudges or is unforgiving of insults or slights	51.3	0.62	0.82	0.29
11.Insensitive to the concerns and needs of others	14.4	0.64	0.79	0.17

Note: * alpha coefficient if item is deleted.

The relatively low interrelatedness of the IPDS-items, already suggested by the moderate internal consistency, was further evaluated using a Principal Components Analysis (PCA) with Oblimin rotation. Based on the number of Eigenvalues exceeding 1.0 (resp. 3.53, 1.59, 1.20, 1.022, 0.942, 0.909, 0.825, 0.659, 0.581, 0.519 en 0.466) and an inspection of the Scree plot (Cattell, 1966), three different factors (F1, F2, and F3) were identified. The pattern matrix, obtained after Oblimin rotation with Kaiser normalization, clearly revealed a clustering of the 11 IPDS-items into three groups. These three factors explain 57.5% of the total variance. The loadings of the 11 IPDS-items on the factors are shown in Table 3.

Table 3 *Factor loadings for principal components extraction and Oblimin rotation on the IPDS items*

Item IPDS	Component		
	1	2	3
2. Feels uncomfortable in situations where he/she is not the center of attention (HST5)	**0.78**	-0.37	0.02
3. Actions usually directed towards obtaining immediate satisfaction (HST7)	**0.75**	0.13	0.02
1. Experiences marked shifts in mood (BRD3)	**0.55**	0.18	-0.03
7. Lack of stable self image (BRD 6)	**0.52**	0.11	-0.12
11. Insensitive to the concerns and needs of others (NAR8)	**0.46**	0.13	-0.10
5. Excessive social anxiety e.g., extreme discomfort in social situations involving unfamiliar people (AVD2, AVD4)	0.10	**0.86**	-0.04
6. Unwilling to get involved with people unless certain of being liked such that the number of friends has been limited (AVD3)	0.19	**0.85**	0.07
9. Expected to be exploited or harmed by others (PAR1)	0.02	0.05	**0.85**
4. Is reluctant to confide in others because of unwarranted fear that information will be used against him or her (PAR5)	0.05	-0.21	**0.76**
8. Prone to discuss and emphasize importance of own achievements and why he/she should be considered a special case (NAR3, NAR4)	0.206	-0.09	**0.74**
10. Bears grudges or is unforgiving of insults or slights (PAR4)	-0.12	0.34	**0.56**

Note: Corresponding DSM-IV personality disorder criteria are presented in parentheses after each item: HST 5= fifth criterion of histrionic PD, HST 7 = seventh criterion of histrionic PD, BRD 3= third criterion of borderline PD, BRD 6= sixth criterion of borderline PD, NAR 8= eight criterion of narcissistic PD, AVD 2=second criterion of avoidance PD, AVD 4 = fourth criterion of avoidance PD, AVD 3 =third criterion of avoidance PD, PAR1 = first criterion of paranoid PD, PAR 5= fifth criterion of paranoid PD, NAR 3= third criterion of narcissistic PD, NAR 4= fourth criterion of narcissistic PD, PAR 4= fourth criterion of paranoid PD. Loadings that refer to a particular factor are printed in bold..

They reveal that the first factor (F_1) is mainly formed by items that are generally considered to reflect cluster B personality disorders (IPDS-items 2, 3, 1, 7, and 11), with the highest loading for the item 'Feels uncomfortable in situations where he/she is not the centre of attention'. Factor 2 (F_2) is dominated by two items that express cluster C personality disorders (IPDS-items 5 and 6: "Excessive social anxiety, e.g., extreme discomfort in social situations involving unfamiliar people" and "Unwilling to get involved with people unless certain of being liked such that the number of friends has been limited". Factor 3 consists of items that are considered to reflect cluster A as well as cluster B personality disorders. Inter-correlations between the three factors ranged from 0.17 (F_1 with F_2) to 0.36 (F_1 with F_3). Cronbach's alpha coefficients for the three subscales revealed poor to moderate interrelatedness of items: $\alpha = 0.35$ for subscale I (Items 1,2,3,7,11), $\alpha = 0.68$ for Subscale II (Items 5,6), and $\alpha = 0.57$ for subscale III (Items 4, 8,9,10).

The influence of different cut-off levels of the total IPDS score on the probability to predict the presence or absence of a PD as diagnosed by the SCID II was evaluated with a Receiver Operating Characteristic (ROC) analysis. The area under the ROC-curve was 0.88 (95% CI: 0.83-

0.92). The performance of the IPDS at different cut-off scores was assessed in terms of the sensitivity, specificity, and predictive values (Table 4).

Table 4 *Sensitivity, specificity, and the power to predict PD at different cut- off scores of the Iowa Personality Disorder Screen (IPDS) and discriminating performance of various item combinations*

IPDS-items	cut-off score	Sensitivity	Specificity	Positive predictive value	Negative predictive value	Correctly classified (%)
1-11	3	84.6	69.4	73.2	81.9	76.9
1-11	**4**	**77.3**	**84.7**	**83.3**	**79.1**	**81.0**
1-11	5	61.9	95.9	93.8	71.8	79.0
1-6	**2**	**76.3**	**73.5**	**74.0**	**75.8**	**74.9**
1-6	3	41.2	88.8	78.4	60.4	65.1
1-6	4	17.5	96.9	85.0	54.3	57.4
4-8	**2**	**74.2**	**72.5**	**72.3**	**74.0**	**73.3**
4-8	3	44.3	92.9	86.0	62.8	68.7
4-8	4	15.4	100	100	54.1	57.4
1,3-8	2	87.6	65.3	71.4	84.2	76.4
1,3-8	**3**	**72.2**	**84.7**	**82.4**	**75.5**	**78.5**
1,3-8	4	40.2	93.9	86.7	61.3	67.2
3,5,6,8,9,11	**2**	**79.4**	**78.6**	**78.6**	**79.4**	**79.0**
3,5,6,8,9,11	3	47.42	93.9	88.5	64.3	70.8
3,5,6,8,9,11	4	17.5	100	100	55.1	59.0

Note: Optimal discriminatory performance of the various set of items are printed in bold.

This table reveals that in case of the full set of the 11 IPDS-items the optimal cut-off score for a SCID-II based diagnosis of PD is 4. A cut-off score of 4 not only correctly classified 81 % of the patients; it also resulted in the best balance of sensitivity (0.77) and specificity (0.85). Analyses aimed at examining the usefulness of the IPDS for determining different types of PD in terms of Clusters A, B, and C, revealed that the IPDS identified 6 of the 7 patients with a Cluster A disorder (86%) according to SCID-II, 52 of the 63 Cluster B patients (83%), and 35 of the 48 Cluster C patients (73%).

In Table 4, outcomes for the total item set as well as the different items sets that were used in earlier studies (Langbehn et al., 1999; Trull & Ambur, 2001) are presented: items 1-6 reflecting the originally intended shortened overall screen, the items 1 and 3-8 as the set of substantial individual discriminators, and the items 4-8 as a smaller, more stringently selected set of individual discriminators (Langbehn et al., 1999). In addition, we analysed a different subset of 6 items containing the two highest loading items of the three factors found with PCA: items 3,5,6,8,9, and 11.

DISCUSSION

Based on the results of the SCID II, at least one PD was diagnosed in 50 percent of the patients. This prevalence is higher than the prevalence of PDs in the general population, but comparable with the frequency of such disorders in psychiatric patients reported by others (Casey, 2000; Masthoff, Trompenaars, Van Heck, Hodiamont, & De Vries, 2005). Because of these different prevalence figures, a limitation of this study is that the predictive values mentioned in this study only apply to patients with psychiatric problems and do not necessarily reflect the predictive values of the IPDS in a general population.

The rather low overall consistency should not be interpreted as an indication that the IPDS lacks psychometric quality. The rather low level of interrelateness of the set of 11 items reveals that this particular set of items reflects several related but separate latent attributes. This relative lack of interrelatedness of the items points at the multifaceted content of the IPDS and reflects the rather heterogeneous content of the concept 'personality disorder'. Because the characteristics of the predictor ought to be driven by the characteristics of the criterium (Hogan & Roberts, 1996), a narrow bandwidth measure will be inappropriate. As a matter of fact, the IPDS is more an *index* consisting of relatively unrelated items, rather than a construct-based *scale* tapping a unidimensional construct (Streiner, 2003). Consequently, high levels of Cronbach's alpha cannot be expected; especially not in relatively short instruments. This outcome should be seen in the light of the well-known bandwidth-fidelity debate (Cronbach, 1960). The low level of internal consistency is the price that has to be paid for the representation of the full richness of the PD concept.

Previous to the study presented here, the IPDS has demonstrated good performance in detecting PDs using a version of the SIPD as the criterion (Langbehn et al., 1999; Morse & Pilkonis 2007; Trull & Amdur, 2001).

The present study tested the practicability and the utility of a self-administered version of the IPDS, using an independent gold standard: the SCID-II. A second limitation is the use of the SCID-II as the criterion in this study can be questioned. However, the SCID-II is widely used across the world and its properties are well established. Taken the independent gold standard into account, it was rather encouraging to find a better predictive power than was obtained in the earlier study by Morse and Pilkonis (2007). For instance, the Area Under the Curve, of 0.73 obtained by the latter authors was substantially lower than the 0.88 we were able to present. While the Morse and Pilkonis study provided evidence that the IPDS self-report version performed moderately well in predicting the presence of a PD diagnoses, the present study shows even better performance, adding to the confidence one can have in the use of the self-report version. The set of all the 11 items, using a cut-off score of 4, had slightly superior sensitivity and specificity to various item subsets, as well as the best predictive values and the best hit rate. The full version of the test may well prove to be optimal in self-administration. However, the consistency of our results and those of Langbehn et al. (1999) also provides support for the shortened version of the subset of

item 1, 3-8, across various methods of test-administration, validation instruments, and language.

Therefore, it can be concluded that the IPDS can be used to identify individuals at risk for having any type of PD in the context of general adult psychiatry. The test itself is not suitable to establish a clinical diagnosis of a PD. However, it can be used successfully as a first step in a two-stage procedure for case identification.. Patients with a score of 4 or higher on the IPDS should be interviewed with a detailed (semi)-structured interview for PDs. Clinicians and researchers can adapt the threshold, depending on the nature of the sample and the importance of sensitivity and specificity.

Future studies should try and use not only samples of persons with psychiatric problems, but also samples that are representative for the general population. In addition to further scrutinizing the predictive validity, the focus of future research should be on the construct validity of the IPDS.

REFERENCES

American Psychiatric Association (1994). *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.) (DSM-IV). Washington, DC: APA.

Bland, J.M., & Altman, D.C. (1997). Cronbach's alpha. *British Journal of Medicine, 314*, 572.

Brown, M.B. (1977). Algorithm A 116: The tetrachoric correlation and its standard error. *Applied Statistics*, *26*, 343-351.

Casey, P. (2000). The epidemiology of personality disorders. In P. Tyrer (Ed.), *Personality disorders: Diagnosis, Management and Course* (2nd ed., pp.71-79). London: Arnold.

Cattell, R.B. (1966). The Scree test for the number of items. *Multivariate Behavioral Research, 1*, 140-161.

Cicchetti, D. (1994). Guidelines, criteria, and rules of thumb for evaluating normed and standardized assessment instruments in psychology. *Psychological Assessment*, *6*, 284-290.

Cronbach, L.J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, *16*, 297-334.

Cronbach, L.J. (1960). *Essentials of psychological testing* (2nd ed.). New York, NY: Harper & Row.

Drasgow, F. (1988). Polychoric and polyserial correlations. In L. Kotz & N.L. Johnson (Eds.), *Encyclopedia of statistical sciences* (Vol. 7, pp. 69-74). New York, NY: Wiley.

First, M.B., Spitzer, R.L., Gibbon, M., & Williams, J.B.W. (1995). The structured clinical interview for DSM-III-R personality disorders (SCID-II): part I: Description. *Journal of Personality Disorders, 9*, 92-104.

Fleiss, J.L. (1981). *Statistical methods for rates and proportions* (2nd ed.). New York, NY: Wiley.

Hanley, J.A. (1989). Receiver Operating Characteristic (ROC) methodology: The state of the art. *Critical Reviews in Diagnostic Imaging*, *29*, 307-335.

Hogan, J., & Roberts, B.W. (1996). Issues and non-issues in the fidelity-bandwidth trade-off. *Journal of Organizational Behavior, 17*, 627-637.

Langbehn, D.R., Pfohl, B.M., Reynolds, S., Clark, L.A., Battaglia, M., Bellodi, L., Cadoret, R., Grove, W., Pilkonis, P., & Links, P. (1999). The Iowa Personality Disorder Screen: Development and preliminary validation of a brief screening interview. *Journal of Personality Disorders, 13,* 75-89.

Langbehn, D.R., & Woolson, R.F. (1997). Discriminant analysis using the unweighted sum of binary variables: A comparison of model selection methods. *Statistics in Medicine*, *16*, 2679-2700.

Lenzenweger, M.F., Loranger, A.W., Korfine, L., & Neff, C. (1997). Detecting personality disorders in a nonclinical population. Application of a 2-stage procedure for case identification. *Archives of General Psychiatry, 54*, 345-351.

Mann, A.H., Raven, P., Pilgrim, J., Khanna, S., Velayudham, A., Suresh, K.P., et al. (1999). An assessment of the standardised assessment of personality as a screening instrument for the international personality examination: A comparison of informant and patient assessment for personality. *Psychological Medicine, 29,* 985-989.

Masthoff, E.D., Trompenaars, F.J., Van Heck, G.L., Hodiamont, P.P., & De Vries, J. (2005). Validation of the WHO Quality of Life Assessment Instrument (WHOQOL-100) in a population of Dutch adult psychiatric outpatients. *European Psychiatry*, *20*, 465-473.

Moran, P., Leese, M., Lee, T., Walter, P., Thornicroft, G., & Mann, A. (2003a). Standardised Assessment of Personality-Abbreviated Scale (SAPAS): Preliminary validation of a brief screen for personality disorder. *British Journal of Psychiatry, 183*, 228-232.

Moran, P**.,** Walsh, E., Tyrer, P., Burns, T., Creed, F., & Fahy, T. (2003b). The impact of co-morbid personality disorder on violence in psychosis – data from the UK700 trial. *British Journal of Psychiatry, 182,* 129-134.

Morse, J.Q., & Pilkonis, P.A. (2007). Screening for personality disorders. *Journal of Personality Disorders, 21,* 179-198.

Newton-Howes, G., Tyrer, P., & Johnson, T. (2006). Personality disorder and the outcome of depression: Meta-analysis of published studies. *British Journal of Psychiatry, 188*, 13-20.

Nunnaly JC(1978). *Psychometric theory* 1st edition. New York: McGraw-Hill.

Pfohl, B.M., Blum, N., & Zimmerman, M. (1997). *Structured interview for DSM-IV personality.* Washington, DC: American Psychiatric Press.

Pfohl, B.M., Blum, N., Zimmerman, M., & Stangl, D. (1989). *Structured interview for DSM-III-R Personality: SIDP-R*. Iowa City, IA: Author.

Schmitt, N. (1996) Uses and abuses of coefficient alpha. *Psychological Assessment*, *8*, 350-353.

Stangl, D., Pfohl, B., Zimmerman, M., Bowers, W., & Corenthal, C. (1985). A structured interview for the DSM-III personality disorders. *Archives of General Psychiatry, 42*, 591-596.

Streiner, D.L. (2003). Being inconsistent about consistency: When coefficient alpha does and doesn't matter. *Journal of Personality Assessment*, *80*, 217-222.

Streiner, D.L., & Norman, G.R. (1989). *Health measurement scales. A practical guide to their development and use*. New York, NY: Oxford University Press, Inc..

Trull, T.J., & Amdur, M. (2001). Diagnostic efficiency of the Iowa Personality Disorder Screen items in a non-clinical sample. *Journal of Personality Disorders, 15,* 351-357.

Uebersax, J. (2007). http://ourworld.compuserve.com/homepages/juebersax/tetra.htm.

Van Horn, E., Manley, C., Leddy, D., Cicchetti, D., & Tyrer, P. (2000). Problems in developing an instrument for the rapid assessment of personality status. *European Psychiatry, 15* (suppl. 1), 29-33.

Weertman, A., Arntz, A., Dreessen, L., Van Velzen, C., & Vertommen, S. (2003). Short-interval test-retest interrater reliability of the Dutch version of the Structured Clinical Interview for DSM-IV personality disorders (SCID-II). *Journal of Personality Disorders*, *17,* 562-567.

Weertman, A., Arntz, A., & Kerkhofs, M.L.M. (1997). Gestructureerd Klinisch Interview voor de DSM-III Persoonlijkheidsstoornissen [Structured Clinical Interview for the DSM-III personality disorders]. *Swets Test Publisher,* 5-15.

Westin, L.K. (2001). *Receiver Operating Characteristic (ROC) analysis. Evaluating discriminance effects among decision support systems.* Umeå, Sweden: Umeå University, Department of Computing Science.

Zimmerman, M. (1994). Diagnosing personality disorders: A review of issues and research methods. *Archives of General Psychiatry, 51*, 225-245.

Chapter

4

Diagnostic efficiency among psychiatric outpatients of a self-report version of a subset of screen items of the Structured Clinical Interview for DSM IV-TR personality disorders (SCID-II)

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Psychological Assessment (2010), 22(4), 945-952.

ABSTRACT

This paper describes the identification of a 10-item set of Structured Clinical Interview for DSM-IV personality disorders (SCID-II) items, which proved to be effective as a self-report assessment instrument in screening personality disorders (PDs). Item selection was based on the retrospective analyses of 495 SCID-II interviews. The psychometric properties were studied in a prospective validation study in a random sample of Dutch adult psychiatric outpatients, using the SCID-II interview as the gold standard. All patients completed first the short questionnaire. One week later, they were interviewed with the full SCID-II. After another week, the short questionnaire was re-administered. According to the scores obtained with the full SCID-II, 97 patients (50 percent) had a personality disorder (PD). The set of ten SCID-II items correctly classified 78.0 percent of all participants. The sensitivity, specificity, positive and negative power were 0.78, 0.78, 0.78 and 0.78, respectively. The results based on the retrospectively obtained data were rather similar to those obtained in the prospective validation study. Therefore, it is concluded that the set of ten SCID-II items can be useful as a quick self-report PD screen in a population of psychiatric outpatients.

Keywords: SCID-II, screening, validity, personality disorders

INTRODUCTION

PDs are rather common in psychiatric services, with a prevalence ranging from 30% in primary care attendees (Moran et al., 2002) to over 50 % in clinical psychiatric populations (Casey, 2000). Since the presence of PDs can adversely affect the management and outcome of mental illnesses (Moran et al., 2003b; Newton-Howes, Tyrer, & Johnson, 2006), assessment of the personality status of patients should be an essential part of every initial psychiatric examination. Currently, standardized clinical interviews, although far from perfect, are generally considered to be the most reliable and valid methods for the assessment of PDs (Zimmerman, 1994). However, such interviews often are quite time consuming. Several short structured interviews for the assessment of PDs have been constructed, for example, the Rapid Personality Assessment Schedule (PAS-R; Van Horn et al., 2000) based on the Personality Assessment Schedule (PAS), the Iowa Personality Disorder Screen (IPDS; Langbehn et al., 1999; Germans et al., 2010) based on the Structured Interview for DSM-III Personality Disorders (SIPD), and the Standardised Assessment of Personality - Abbreviated Scale (SAPAS, Moran et al., 2003a; SAPAS-SR, Germans et al., 2008) based on the Standardised Assessment of Personality (SAP). Furthermore, the widely used Structured Clinical Interview for DSM-IV personality disorders (SCID-II) has a self-report version. An advantage of this SCID-II questionnaire over the PAS-R, the IPDS, and the SAPAS is that, in contrast to these instruments, it is based on DSM-IV criteria. However, the SCID-II questionnaire, covering the full SCID-II interview, still requires a considerable amount of attention and concentration, which is quite taxing for psychiatric patients.

The aim of the present study was to develop a new, very short (and, therefore, easy to administer), self-report screening instrument with adequate psychometric properties, based on items of the SCID-II. This instrument might be useful in diagnostic procedures. The major goals for the present study were (a) to select a small subset of SCID-II items for screening purposes and (b) to validate this subset as a brief self-report questionnaire in a sample of adult psychiatric outpatients. It should be noted that the construction of the short screen was based on SCID-II interview data, and not on data gathered with the full self-report SCID-II questionnaire.

METHOD

Study design

The overall design had two phases. In phase I, data collected by Masthoff and Trompenaars (2001) were scrutinized in order to identify SCID-II items that predicted best a PD diagnosis. In Phase II, this set of items was validated in a prospective study, using the SCID-II interview as the gold standard. The study was approved by the Regional Medical Ethical Committee and conducted at the Mental Health Centre (MHC; GGZ Midden-Brabant) in Tilburg, the Netherlands.

Measures

In both studies, the SCID-II interview (First et al., 1995; Dutch version by Weertman, Arntz, & Kerkhofs, 1997) was used. This instrument covers the complete set of PDs listed in DSM-IV-TR (American Psychiatric Association, 1994), as well as the passive-aggressive and depressive PDs, listed in the appendix of DSM-IV-TR. The SCID-II interview contains two parts: eight open questions on the patient's general behaviour, interpersonal relationships, and self-reflective abilities, followed by 140 items scored as 1 (*absent*), 2 (*sub-threshold*), or 3 (*threshold*). The instrument is primarily designed to yield categorical diagnoses of PDs. The interrater reliability and internal consistency are adequate (Maffei et al., 1997; Westen & Shelder, 1999a, 1999b). The psychometric properties of the Dutch version are fair to good (Weertman, Arntz, Dreessen, Van Velzen, & Vertommen, 2003). The interrater reliability (Cohen's Kappa) ranged from 0.77 for the obsessive compulsive PD to 0.82 for the avoidant PD. The overall Kappa was 0.80 (Arntz et al., 1992). These figures are comparable with the associations found in the study of Masthoff and Trompenaars (2006), who found for two well-trained and certified raters an overall Kappa of 0.87. Because the second phase was performed by only one well-trained and certified interviewer, interrater reliability could not be calculated.

PHASE 1

METHOD AND STATISTICAL PROCEDURE

Participants

For the development of the short self-report version of the SCID-II, the set of data that was collected by Masthoff and Trompenaars (2006), was used. Their study focussed on the validation of the World Health Organisation Quality of Life assessment instrument (WHOQoL-100; WHOQOL Group, 1994, 1995). Participants were Dutch adult outpatients able to read and write the Dutch language. Excluded were persons unable to undergo the investigation protocol due to psychosis, dyslexia, mental retardation, severe problems with sight or hearing, and cerebral damage.

Axis-II diagnoses were determined using the SCID-II interview. Included were participants aging 21-50 years (mean age = 33.5 years; *SD* = 8.6). The total group that entered the study contained 533 participants of which 495 completed the test booklet (92.9%). The study group consisted of 219 men (44.2%) and 276 women (55.8%). All participants were recruited in the phase of an initial evaluation and were not currently in treatment. Nearly a quarter of the sample (22%) had no diagnosis on Axis I, as measured with the Schedules of Clinical Assessment in Neuropsychiatry (SCAN-2.1; Giel & Nienhuis, 1996; Wing et al., 1990). Twenty-eight percent had a mood disorder and 18% an anxiety disorder. Approximately half of the sample (51.1 %) had a PD. The mean number of PD diagnoses among those with any PD was 1.2. The frequency of each personality diagnosis is listed in Table 1.

Table 1 *Frequency of DSM-IV-TR Personality Diagnoses (PD) and the percentage of correctly classified caseness in the test sample using the 10-item self-report version of the SCID-II*

Diagnosis	Derivation sample; frequency of PD (%)	Test sample; frequency of PD (%)	% correctly detected full SCID-II diagnoses by the 10-item SCID-II (%)	False Negative (%)	False Positive (%)
Cluster A					
Paranoid	1.0	3.1	100	0	48.7
Schizoid	2.2	0.5	100	0	50.0
Schizotypal	0.6	0.5	100	0	50.0
Any cluster A	3.8	3.6	100	0	48.0
Cluster B					
Borderline	14.3	22.6	88.6	11.4	39.1
Histrionic	1.6	2.1	50.0	50.0	50.3
Narcissistic	4.4	7.7	86.7	13.3	47.2
Antisocial	5.5	10.3	95.0	5.0	45.1
Any cluster B	25.8	32.3	87.3	12.7	32.6
Cluster C					
Avoidant	9.9	13.8	81.3	18.5	45.2
Dependent	5.3	7.2	85.7	14.3	47.5
Obs.-Comp.	4.8	10.8	52.4	47.6	44.8
Any cluster C	20.0	24.6	70.8	29.2	43.5
Personality Disorder NOS*					
P.A.**	2.2	4.6	88.9	11.1	48.4
Depressive	9.5	5.1	100	0	47.6
Any PD NOS*	11.7	8.7	94.1	5.9	46.1
Any personality diagnosis	51.1	49.7	78.3	21.7	22.5

Note. The derivation sample (N=495) stems from the study of Masthoff, and Trompenaars (2001). The test sample is the validation sample used in the present study (N=197)
*Personality Disorder NOS is Personality Disorder Not Otherwise Specified.
**P.A.= passive-aggressive Personality Disorder.

For the identification of those items that best predicted SCID-II diagnoses, as a first step, a series of logistic regression analyses were performed. In order to conduct these logistic regression analyses, for determining the dependent variables, SCID-II data were dichotomised for each separate PD into *present* (i.e., threshold) or *absent* (i.e., absent and subthreshold). For every single PD, only those items were selected from the total sets of SCID-II items, intended to measure a particular PD that had the best discriminating function for predicting caseness, that is, the

absence or presence of any PD, according to the full SCID-II interview. Thereafter, again using logistic regression analyses, this set of potential predictors was used to predict caseness.

RESULTS

Based on the first series of logistic regression analyses, using caseness for separate PDs as dependent variables, a total of 16 SCID-II items were selected that significantly ($p < 0.05$) predicted caseness. Only items, representing the following PDs, proved to be significant predictors of the presence or absence of those particular PDs: Paranoid (PAR1, PAR5), Narcissistic (NAR1), Borderline (BRD3, BRD4, BRD5, BRD8, BRD9), Avoidant (AVD2, AVD6), Dependent (DEP2, DEP7, DEP8), and Depressive (DEPR2, DEPR4, DEPR6). These items are presented in Table 2.

Table 2 *Initial set of SCID-II items with predictive power regarding caseness*

Item No.	SCID-II item
PAR1	Suspecting, without sufficient basis, that others are exploiting, harming, or deceiving him or her
PAR5	Persistently bears grudges
NAR1	Having a grandiose sense of self-importance
BRD3	Identity disturbance: markedly and persistently unstable self-image or sense of self
BRD4	Impulsivity in at least two areas that are potentially self-damaging
BRD5	Recurrent suicidal behaviour, gestures, or threats, or self-mutilating behaviour
BRD8	Inappropriate, intense anger or difficulty controlling anger
BRD9	Transient, stress-related paranoid ideation or severe dissociative symptoms
AVD2	Unwilling to get involved with people unless certain of being liked
AVD6	Views self as socially inept, personally unappealing, or inferior to others
DEP2	Needs others to assume responsibility for most major areas of his or her life
DEP7	Urgently seeks another relationship as source of care and support when a close relationship ends
DEP8	Is unrealistically preoccupied with gears of being left to take care of himself or herself
DEPR2	Self-concept centers around beliefs of inadequacy, worthlessness, and low self-esteem
DEPR4	Being brooding and given to worry
DEPR6	Being pessimistic

As the next step, a new logistic regression analysis was performed; now with the 16 SCID-II items as predictor variables and caseness, reflecting *any* PD instead of separate PDs, as outcome variable. A good model fit could be obtained on the basis of this set of 16 predictors: χ^2 (16, N = 495) = 247.10, $p < 0.001$. Overall predictive rate was 79.0%. It turned out that five items were not significantly associated with the dependent variable: PAR5, BRD9, AVD6, DEP7, and DEP8. For two items, BRD 3 and PAR1, *p*-values of 0.055 and 0.056 were obtained, respectively. Because items reflecting Cluster B in general (6 out of 16) and borderline PD specifically (5 out of 16)

were relatively overrepresented in the 16-item set, while there were only two items representing Cluster A, it was decided to remove BRD3 and to keep PAR1 as input for further analysis.
The remaining set of 10 items was entered in one step in a new logistic regression analysis aimed at predicting caseness (*any* PD). There was a good model fit on the basis of these 10 predictors: χ^2 (10, N = 495) = 228.23, $p < 0.001$. The overall predictive rate was 76.0%. Table 3 shows the contribution of the individual items to the model by presenting regression coefficients, Wald statistics, and significance levels. Inspection of Table 3 reveals that all 10 items contributed significantly to the prediction of the presence of *any* PD.
Therefore, it was decided to accept this set of 10 items as a useful screening instrument for PDs.

Table 3 *Logistic regression analysis with caseness (any personality disorder) as outcome variable and the reduced set of 10 SCID-II items as predictors*

SCID-II items	***B***	*Wald*	*p*
AVD2	1.10	14.69	< 0.001
DEPR6	0.80	5.99	0.014
NAR1	2.73	26.66	< 0.001
BRD4	2.31	21.54	< 0.001
DEP2	1.21	17.95	< 0.001
DEPR2	0.88	7.49	0.006
DEPR4	-0.86	8.35	0.004
BRD5	2.26	11.80	0.001
PAR1	1.93	7.58	0.006
BRD8	1.09	5.70	0.017
(Constant)	-1.26	49.57	< 0.001

Note: Corresponding DSM-IV personality disorder criteria are presented:
AVD2= second criterion of avoidance PD, DEPR6= sixth criterion of depressive PD, NAR1 = first criterion of narcissistic PD, BRD 4= fourth criterion of borderline PD, DEP2= second criterion of depend PD, DEPR2= second criterion of depressive PD, DEPR4= fourth criterion of depressive PD, BRD5=fifth criterion of borderline PD, PAR1 = first criterion of paranoid PD, BRD8= eight criterion of borderline PD.

Employing this set of ten items with a cut-off score of 5 gave a total hit rate of 77.0% with a sensitivity of 72.0%, and a specificity of 83.0 %. A cut-off score of 4 produced a total hit rate of 76.0% with a sensitivity of 82.0% and a specificity of 70.0%.

PHASE 2

METHOD AND STATISTICAL ANALYSES

Participants

From all outpatients (N = 2116), referred to the MHC between March 2004 and March 2005, approximately 10% (N = 207) was asked to participate. In line with the procedure of Masthoff and Trompenaars (2006), participants were Dutch adult outpatients able to read and write the Dutch language. Excluded were persons unable to undergo the investigation protocol due to psychosis, dyslexia, mental retardation, severe problems with sight or hearing, and cerebral damage. Participation in the earlier study of Masthoff and Trompenaars (2006) was also an exclusion criterion. So, there was no overlap between the samples of Phase 1 and Phase 2.

Recruitment took place every workday by random selection: one referred patient in the morning and one in the afternoon. Although initially informed consent was given by all the recruited patients, 12 patients (5.8 %; 8 men and 4 woman; mean age = 33.0 year) did not return after the first assessment session. They were, therefore, excluded from the remaining part of the study. As a result, the study group consisted of 195 patients (112 women (57.4%) and 83 men ((42.6%), mean age = 32.7 years, SD = 8.9)). All participants were recruited in the phase of an initial evaluation and were not currently in treatment.

A comparison between the samples, used in Phase I and Phase II, respectively, revealed no significant differences ($p < 0.01$) regarding gender and age.

Procedure

The set of ten screening items was completed as a self-report questionnaire (see Appendix) during the initial clinical consultation. One week later, the SCID-II interview was conducted by an interviewer (SG). This interviewer was blind to the outcome of the initial administration of the questionnaire. After another week, the set of screening items was re-administered for the examination of test-retest reliability.

Statistical Analyses

All analyses were performed with SPSS version 12.0 (SPSS Inc., Chicago, IL). The internal consistency of the screening instrument was examined using Cronbach's alphas. The test-retest reliability at the level of the total scale was calculated using Pearson correlation coefficients. For separate items this was estimated using Phi coefficients for binary data. Furthermore, the dimensionality of the screening scale was examined with a Principal Components Analysis (PCA) on a matrix of tetrachoric correlations. Tetrachoric correlations were estimated with the TetMat program (Uebersax, 2007), using the Applied Statistics algorithm AS 116 (Brown, 1977). A Receiver Operating Characteristic (ROC) analysis was used to examine the effect of various cut-off scores on the screening instrument with respect to the prediction of the clinical diagnosis as established by the gold standard, the SCID-II interview. To calculate the sensitivity and specificity of various cut-off scores, a sensitivity and specificity plot was constructed.

RESULTS

In line with the earlier finding of Masthoff and Trompenaars (2006), who found that 51.1% of their sample had a SCID-II diagnosis, in the current sample 97 of the 195 patients, i.e., 50%, received a SCID-II diagnosis. Looking at the false negative percentages the screen works best regard to identification of patients with cluster A, antisocial and depressive PDs. It works quite satisfactory with respect to borderline and narcissistic PDs as well as avoidant and dependent PDs. The screen does less well with respect to histrionic and obsessive compulsive PDs (Table 1). The mean number of PDs among those with any PD was 1.8 (SD= 0.87). The test-retest coefficient for the total score was 0.94. Phi coefficient for binary data total (with a cut-off score of 4) was 1.00. The internal consistency for the full screen was 0.67.

In Table 4 the contribution to internal consistency (alpha coefficient if item is deleted), Phi coefficients for binary data, and corrected item-total correlation coefficients are shown. Test-retest reliability of items was reasonable, with the item 'Unwilling to get involved with people unless certain of being liked' (Item 1) showing the lowest, and the items 'Inappropriate, intense anger or difficulty controlling anger' (Item 10) and 'Self-concept centres around beliefs or inadequate worthlessness and low self-esteem' (Item 3) the highest stability across time. The internal consistency coefficients were moderate, ranging from 0.60 to 0.68.

Table 4 *Internal consistency, test-retest, Phi, and corrected total correlation coefficients for items of the short self report screen*

Items of the screen	Cronbach alpha	Phi (binary data)	Corrected item-total correlation
1. Unwilling to get involved with people unless certain of being liked (AVD 2)	0.67	0.78	0.14
2. Needs others to assume responsibility for most major areas of his or her life (DEP 2)	0.68	0.94	0.13
3. Self-concept centers around beliefs of inadequacy, worthlessness, and low self- esteem (DEPR 2)	0.62	0.99	0.45
4. Being brooding and given to worry (DEPR 4)	0.60	0.95	0.52
5. Being pessimistic (DEPR 6)	0.63	0.95	0.38
6. Suspecting, without sufficient basis, that others are exploiting, harming, or deceiving him or her (PAR 1)	0.62	0.94	0.44
7. Having a grandiose sense of self-importance (NAR 1)	0.65	0.95	0.30
8. Impulsivity in at least two areas that are potentially self damaging (BRD 4)	0.65	1.00	0.29
9. Recurrent suicidal behaviour, gestures, or threats, or self-mutilating behaviour (BRD 5)	0.64	0.94	0.33
10. Inappropriate, intense anger or difficulty controlling anger (BRD 8)	0.65	0.97	0.32

Note: * alpha coefficient if item is deleted.

The ROC-curve had an area-under-the curve of 0.83 (95% CI: 0.77-0.89). The performance of the screen at different cut-off scores was assessed by reference to the sensitivity, specificity, and the predictive values (Table 5).

Table 5 *Sensitivity, specificity and the power to predict personality disorder at different cut- off scores of the short self report screen*

cut- off score	Sensitivity	Specificity	Positive predictive value	Negative predictive value	Correctly classified (%)
2	99.0	29.6	58.2	96.7	64.1
3	88.7	49.0	63.2	81.4	68.7
4	78.4	77.6	77.6	78.4	78.0
5	67.0	82.7	79.3	71.7	74.9
6	48.5	91.8	85.5	64.3	70.3

The sensitivity and specificity plot revealed that the optimal cut-off score for a SCID-II based diagnosis of PD was 4. A cut-off score of 4 not only correctly classified 78.0% of the patients; it also resulted in the best balance of sensitivity (0.78) and specificity (0.78).
The correlations between the self report data and the SCID-II interview outcomes ranged from 0.07 for schizoid PD to 0.51 for borderline PD (Table 6).

Table 6 *Correlation between the short self report screen and the full SCID-II interview*

	Correlation	P	Cluster
Personality disorders			
Paranoid	0.34**	<0.01	A
Schizoid	0.07	0.16	A
Schizotypal	0.11	0.07	A
Borderline	0.51**	<0.01	B
Histrionic	0.10	0.08	B
Narcissistic	0.31**	<0.01	B
Antisocial	0.39**	<0.01	B
Avoidant	0.12*	0.04	C
Dependent	0.20**	<0.01	C
Obsessive-Compulsive	0.10	0.07	C
Passive-Aggressive	0.11	0.06	NOS
Depressive	0.13*	0.03	NOS

*=significance <0.05

**= significance <0.01
The Cohen's kappa was 0.56, reflecting a moderate but reasonable association.

DISCUSSION

This paper describes the identification of a 10-item set Structured Clinical Interview for DSM-IV PDs (SCID-II) items, which proved to be effective as a self-report version in screening PDs. Item selection was based on the retrospective analyses of 495 SCID-II interviews. The psychometric properties of this set of items were studied in a random sample of 195 Dutch adult psychiatric outpatients, using the SCID-II as the gold standard.

This study demonstrated that the 10-item self-report short version of the SCID-II can be used effectively to identify individuals who are potentially at high-risk of having any type of personality With respect to the number of participants with any PD, there was no significant difference between the two samples. In the derivation sample had 51.1% a PD, while in the test sample this was 50 %. The only difference was that in the derivation sample the mean number of PDs among those with any PD was 1.2, while in the test sample this was 1.8, reflecting a higher rate of co-morbidity. A higher rate of co-morbidity facilitates the identification of any PD (case versus non-case). However, this figure of 1.8 is very much in line with many studies reporting average numbers of PDs per individual.

A comparison of the current results with the performances of other screening instrument reveals that the SCID-II self-report screen is quite comparable with other available assessment instruments, While the SAPAS (Moran et al., 2003a; SAPAS-SR, Germans et al., 2008) and the IPDS (subset Items 4-8, Langbehn et al., 1999; Germans et al., 2010) have slightly better psychometric qualities, the PAS-R (Van Horn et al., 2000) demonstrates a somewhat lower sensitivity and a lower positive predictive value (see Table 7).

Table 7 *Sensitivity, specificity, and the power to predict personality disorder for the different screening instruments*

Instrument	Sensitivity	Specificity	Positive predictive value	Negative predictive value	Good classified (%)
SAPAS [a]	94	85	89	92	90
IPDS [b]	92	79			
PAS-R [c]	64	82	49	89	78
SCID-II screen	78	78	78	78	78
SAPAS-SR [d]	83	80	80	82	81
IPDS [e]	77	85	83	79	81

Note: [a] Moran et al., 2003a, 2003b; SAPAS= Standardised Assessment of Personality Abbreviated Scale;
[b] Langbehn et al., 1999; IPDS= Iowa Personality Disorder Screen;
[c] Van Horn et al., 2000; PAS-R= Rapid Personality Assessment Schedule.
[d] Germans et al., 2008; SAPAS-SR=Self-report Standardized Assessment of Personality- abbreviated Scale.
[e] Germans et al., 2010; IPDS= Self-report version of the Iowa Personality Disorder Screen.

When making these comparisons, it should be kept in mind that the samples used in the international validation studies of the SAPAS and the IPDS were quite different from the one used in the present study. The international samples of the SAPAS and IPDS studies consisted of in- and outpatients, while participants in our study were representative of a population referred to the Mental Health Centre, but as yet without a psychiatric diagnosis. Therefore, the prevalence of PDs presumably is lower in our study sample. Furthermore, in contrast with some of the studies mentioned above (Moran et al., 2003a; Langbehn et al., 1999), in the present study the sample was randomly chosen and the investigator was blinded for the results of the questionnaire till the SCID-II interview was performed.

It is quite remarkable that items reflecting particular PDs, like, for instance, schizoid or schizotypal PDs, were not selected for the initial set of screening items, and consequently, were not represented in the final screen. This presumably reflects the presence of particular PDs in our study samples. Furthermore, it is quite conceivable that the finding that three of the ten selected items pertain to depressive PD also reflects the particular composition of the population studied. It should be noted that several studies indicate that PDs are so frequent in affective disorders that it is not just the result of the use of overlapping criteria (Frances, Widiger, & Fyer, 1990). For instance, in clinical samples as well as nonpatient samples it was found that nearly half of the participants with a history of major depression had a PD (Brieger, Ehrt, & Marneros, 2003; Shea, Widiger, & Klein, 1992; Zimmerman & Coryell, 1989). This raises a question regarding how specific the current 10-item screen may be to PD versus depressive symptoms. In the derivation sample, the axis-1 diagnoses were determined with the Schedule for the clinical Assessment in Neuropsychiatry (SCAN), version 2.1 (Giel & Nienhuis 1996). No significant correlation between depressive PD and anxiety or depression were found in this sample.

The dimensions underlying the set of selected screening items did not represent the distinction into three clusters of PDs (A, B, C), but rather reflected the B en C clusters, which is in accordance with outcomes of the studies presented in Table 1. Participants with a single cluster A PD can, therefore, easily become false negatives. This seems, however, a minor problem, because only a small number of participants in the derivation sample as well as in the test sample had a single cluster A PD (1.0%), which is comparable with the outcomes of other studies (e.g., Bernstein, Useda, & Siever, 1995) and also because all the persons with a cluster A PD were identified with the Screen (Table 1). The fact that some cluster B or cluster C PDs (e.g., histrionic, antisocial, obsessive-compulsive) are not represented with items specific for these PDs is probably also a minor limitation. Co-morbidity with other PDs within these clusters prevents false negatives. The selected depressive personality items from the derivation sample were correlated with the other PDs. The selected depressive personality items appeared to be associated with various PDs. Item 2, 4 and 6 was significant ($p<0.01$) correlated with to the depended PD, the item 2 and 4 were significant related with the avoidant PD. Finally, item 4 was related with the antisocial PD.

To be certain that the problems mentioned above are indeed minor problems more investigations in the future are necessary.

Another possible limitation concerns the fact that the present screen offers respondents only a binary choice, reflecting absence or presence of symptoms. Using a 2-point rating scale is common procedure in the development of short screening instruments in this field because it contributes to the requirements of a quick and user-friendly measure. When comparing such an instrument with interview-based ratings containing an additional rating option (i.e., absent, subthreshold , threshold), like it is the case in the SCID-II, then rating bias by patients can occur. Future research is needed to examine whether rating bias is indeed a distorting factor.

The findings of the present study should be interpreted in the light of a number of other possible limitations. Because of the dependence on disease prevalence, screening for disease in low-prevalence populations yields few positive test results (Gray, 2002). While the prevalence of PDs in the present sample of psychiatric patients was 50%, this prevalence will undoubtedly be much lower in the general population, yielding a lower positive predictive value for the 10-items SCID-II screen in this setting. It remains to be seen how well the screening instrument will perform in community samples. Furthermore, although the SCID-II interview is widely used and its properties are well established, the use of this instrument as the criterion and gold standard might be questioned.

It is concluded that the 10-item SCID-II questionnaire is useful to identify individuals at risk for having any type of PD in the context of general adult psychiatry. This outcome is quite remarkable, taking into account that self-report ratings on items dealing, for instance, with negative expectations or temper outbursts, may not necessarily correspond to the reference standard used by clinicians in making SCID-II interview-based ratings.

By definition, the 10-item scale itself is not suited for making clinical diagnoses of PD, but it might be used effectively as a first step in a two-stage procedure for case identification. Patients with a score of 4 or more on the screening scale should be interviewed with a detailed (semi-) structured interview for PDs. Clinicians and researchers might wish to adopt higher or lower thresholds, depending on the nature of the sample and the relative importance of sensitivity and specificity.

REFERENCES

American Psychiatric Association (1994). *Diagnostic and Statistical Manual of Mental Disorders* (4th edition) (DSM-IV). Washington, DC: APA.

Arntz, A., Van Beijsterveld, Hoekstra, B., Hofman, A., Eussen, M., & Sallaerts, s. (1992). The interrater reliability of a Dutch version of the Structured Clinical Interview for DSM-III Personality Disorders. *Acta Psychiatrica Scandinavica, 85,* 394-400.

Bernstein, D.P., Useda, D., & Siever, L.J. (1995). Paranoid personality disorder. In W.J. Livesly (Ed.), *The DSM-IV personality disorders* (pp. 45-57). London: The Guilford Press.

Brieger, P., Ehrt, U., & Marneros, A. (2003). Frequency of comorbid personality disorders in bipolar and unipolar affective disorders. *Comprehensive Psychiatry, 44,* 28-34.

Brown, M.B. (1977). Algorithm A 116: The tetrachoric correlation and its standard error. *Applied Statistics*, *26*, 343-351.

Casey, P. (2000). The epidemiology of personality disorders. In P.Tyrer (Eds), *Personality disorders: Diagnosis, management and course* 2nd edition (pp. 71 –79). London: Arnold.

First, M.B., Spitzer, R.L., Gibbon, M., & Williams, J.B.W. (1995). The structured clinical interview for DSM-III-R personality disorders (SCID-II): Part I: Description. *Journal of Personality Disorders, 9*, 92-104.

Frances, A., Widiger, T., & Fyer, M.R. (1990). The influence of classification methods on comorbidity. In J.D. Maser & C.R. Cloninger (Eds.), *Comorbidity of mood and anxiety disorders* (pp. 41-59). Washington, DC: American Psychiatric Press.

Germans, S., Van Heck, G.L., Moran, P., & Hodiamont, P.P.G. (2008). The Self-report Standardized Assessment of Personality-abbreviated Scale: Preliminary results of a brief screening test for personality disorders. *Personality and Mental Health, 2*, 70-76.

Germans, S., Van Heck, G.L., Langbehn, D.R., & Hodiamont, P.P.G. (2010). The Iowa Personality Disorder Screen (IPDS): Preliminary results of the validation of a self-administered version in a Dutch population. *European Journal of Psychological Assessment, 26,* 11-18.

Giel, R., & Nienhuis, F.J. (1996). SCAN-2.1: Schedules for Clinical Assessment in Neuropsychiatry [In Dutch: Vragenschema's voor klinische beoordeling in neuropsychiatrie]. Geneva: WHO, Division of Mental Health/ Groningen, The Netherlands: University of Groningen, Division of Social Psychiatry.

Gray, G.E. (2002). Evidence-based medicine: An introduction for psychiatrists. *Journal of Psychiatric Practice, 8,* 5-13**.**

Keown, P., Holloway, F., & Kuipers, E. (2002). The prevalence of personality disorders, psychotic disorders and affective disorders amongst the patients seen by a community mental health team in London. *Social Psychiatry and Psychiatric Epidemiology, 37,* 225 –229.

Langbehn, D.R., Pfohl, B.M., Reynolds, S., Clark, L.A., Battaglia, M., Bellodi, L., Cadoret, R., Grove, W., Pilkonis, P., & Links, P. (1999). The Iowa Personality Disorder Screen: Development and preliminary validation of a brief screening interview. *Journal of Personality Disorders, 13,* 75-89.

Lenzenweger, M.F., Loranger, A.W., Korfine, L., & Neff, C. (1997). Detecting personality disorders in a nonclinical population. Application of a 2-stage procedure for case identification. *Archives of General Psychiatry, 54*, 345-351.

Maffei, C., Fossati, A., Agostoni, I., Barraco, A., Bagnato, M., Deborah, D., Namia, C., Novella, L., & Petrachi, M. (1997). Interrater reliability and internal consistency of the structured clinical interview for DSM IV axis-II personality disorder (SCID-II) version 2.0. *Journal of Personality Disorders, 11,* 85-92.

Mann, A.H., Jenkins, R., Cutting, J.C., & Cowen, P.J. (1981). The development and use of a standardized assessment of abnormal personality. *Psychological Medicine*, *11*, 839-847.

Mann, A.H., Raven, P., Pilgrim, J., Khanna, S., Velayudham, A., Suresh, K.P., et al. (1999). An assessment of the standardised assessment of personality as a screening instrument for the international personality examination: A comparison of informant and patient assessment for personality. *Psychological Medicine, 29,* 985-989.

Masthoff, E.D.M., & Trompenaars, A.J.W.M. (2006). *Quality of life in psychiatric outpatients.* Doctoral Dissertation. Tilburg, the Netherlands: Tilburg University.

Moran, P., Jenkins, R., Tylee, A., Blizard, R., & Mann, A. (2002). The prevalence of personality disorder among UK primary care attenders. *Acta Psychiatrica Scandinavica, 102*, 52-57.

Moran, P., Leese, M., Lee, T., Walter, P., Thornicroft, G., & Mann, A. (2003a). Standardised Assessment of Personality- Abbreviated Scale (SAPAS): Preliminary validation of a brief screen for personality disorder. *British Journal of Psychiatry, 183*, 228-232.

Moran, P.**.,** Walsh, E., Tyrer, P., Burns, T., Creed, F., & Fahy, T. (2003b). The impact of co-morbid personality disorder on violence in psychosis – data from the UK700 trial. *British Journal of Psychiatry, 182,* 129-134.

Newton-Howes, G., Tyrer, P., & Johnson, T. (2006). Personality disorder and the outcome of depression: Meta-analysis of published studies. *British Journal of Psychiatry, 188*, 13-20.

Pfohl, B.M., Blum, N., Zimmerman, M., & Stangl, D. (1989). *Structured interview for DSM-III-R Personality: SIDP-R.* Iowa City, IA: Author.

Shea, M.T., Widiger, T.A., & Klein M.H. (1992). Comorbidity of personality disorders and depression. Implications for treatment. *Journal of Consulting and Clinical Psychology, 60,* 857-868.

Stangl, D., Pfohl, B., Zimmerman, M., Bowers, W., & Corenthal, C. (1985). A structured interview for the DSM-III personality disorders. *Archives of General Psychiatry, 42*, 591-596.

Trull, T.J., & Amdur, M. (2001). Diagnostic efficiency of the Iowa Personality Disorder Screen items in a nonclinical sample. *Journal of Personality Disorders, 15,* 351-157.

Uebersax, J. (2007). http://ourworld.compuserve.com/homepages/juebersax/tetra.htm.

Van Horn, E., Manley, C., Leddy, D., Cicchetti, D., & Tyrer, P. (2000). Problems in developing an instrument for the rapid assessment of personality status. *European Psychiatry, 15* (suppl. 1), 29-33.

Weertman, A., Arntz, A., Dreessen, L., Van Velzen, C., & Vertommen, S. (2003). Short-interval test-retest interrater reliability of the Dutch version of the Structured Clinical Interview for DSM-IV personality disorders (SCID-II). *Journal of Personality Disorders*, *17,* 562-567.

Weertman, A., Arntz, A., & Kerkhofs, M.L.M. (1997*). Gestructureerd Klinisch Interview voor de DSM-III Persoonlijkheidsstoornissen* [Structured Clinical Interview for the DSM-III personality disorders]. Lisse, The Netherlands: Swets Test Publisher.

Westen, D., & Shedler, J. (1999a). Revising and assessing Axis II, Part I: Development of a clinically and empirically valid assessment method. *American Journal of Psychiatry, 156*, 258-272.

Westen, D., & Shedler, J. (1999b). Revising and assessing Axis II, Part II: Toward an empirically based and clinically useful classification of personality disorders. *American Journal of Psychiatry, 156*, 273-285.

WHOQOL Group (1994). Development of the WHOQOL: Rationale and current status. *International Journal of Mental Health*, *23*, 24-56.

WHOQOL Group (1995). The World Health Organization Quality of Life Assessment instrument (WHOQOL): Position paper for the World Health Organization. *Social Science & Medicine*, *41*, 1403-1409.

Wing, J.K., Babor, T. Brugha, T., Burke, J., Cooper, J.E., Giel, R., Jablenski, A., Regier, D. & Sartorius, N. (1990). Schedules for Clinical Assessment in neuropsychiatry. *Archives of General Psychiatry, 47*, 589-593.

Zimmerman, M. (1994). Diagnosing personality disorders: A review of issues and research methods. *Archives of General Psychiatry, 51*, 225-245.

Zimmerman, M., & Coryell, W. (1989). DSM-III personality disorder diagnoses in a nonpatient sample. Demographic correlates and comorbidity. *Archives of General Psychiatry, 46(8),* 682-689.

APPENDIX. SELF-REPORT VERSION OF THE STRUCTURED CLINICAL INTERVIEW FOR DSM-IV PERSONALITY DISORDER II SCREEN (VERSION 1.0)

Name:
Number:
Date:

The next few questions are about how you are as a person, that means how you usually feel yourself and act. I know that you have or had problems at some time, I don't want you to describe that time, I want you to answer the questions like you are usually doing without those problems. You can answer the questions by circling the answer 'yes' or 'no' whatever is best applying to your situation.

1. Do you avoid getting involved with people unless you are certain they will like you?	Yes / No
If yes: If you don't know whether someone likes you, would you ever make the first move?	Yes / No
(Rate only if both responses are positive)	
2. Do you depend on other people to handle important areas in your life? For example: finances, childcare, living arrangements, holidays.	Yes / No
3. Do you belief that you are fundamentally an imperfect person and do you often feel that you are not good enough?	Yes / No
4. Do you repeatedly think about nasty things that have happened in the past or are you continue concerns about nasty things that can happen in the future?	Yes / No
5. Do you expect often the worst in a situation	Yes / No
6. Do you often have to keep an eye out to stop people from using you or hurting you?	Yes / No
7. Do you have any special talents or accomplishments or underestimated people your special talents often?	Yes / No
8. Have you often done things impulsively?	Yes / No
If YES did it cause problems?	Yes / No
For example:	
Buying things you really couldn't afford	Yes / No
Having sex with people you hardly knew	Yes / No
Drinking too much or taking drugs	Yes / No
Driving recklessly	Yes / No
Overeating	Yes /No
(Rate only if at least two examples are positive)	
9. Have you tried to hurt or kill yourself or ever threatened to do so?	Yes / No
Have you ever cut or burnt yourself on purpose?	Yes / No
(Rate only if both responses are positive)	
10. Do you often have temper outbursts or get so angry that you lose control?	Yes / No

CHAPTER 5

Results of a validation study of the SCID-II personality questionnaire within a psychiatric outpatients' population

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Dutch short version: PsychoPraktijk, in press.

ABSTRACT

Background: the treatment of psychiatric disorders and serious psychosocial problems is often complicated by personality disorders (PDs). It is to be expected that, if PDs are detected as soon as possible, this will lead to more effective treatment.

Purpose: validating the questionnaire, filled in by the patients themselves, that forms part of the Structural Clinical Interview for DSM-IV-TR personality disorders (SCID-II), as a screening instrument in the diagnostic stage.

Method: a prospective study, where the screening qualities of the SCID-II personality questionnaire were determined for 79 patients, who had (again) been referred to the outpatients' psychiatric clinic, with the SCID-II interview as the gold standard.

Results: 48.1% of the patients were consistent with the PD diagnosis, according to the criteria of the SCID-II interview. With the standard cut-off score, the sensitivity of the SCID-II personality questionnaire was 100% and the specificity 26.8%. The number of patients that were diagnosed correctly, using the questionnaire, was 62.0%. When the standard cut-off scores were increased by 3, the sensitivity was 71.1% and the specificity 78.1%, and the number of correctly identified patients increased to 74.7%.

Conclusion: This study has shown that the SCID-II personality questionnaire, with modified cut-off scores, is useful as a screening tool for PDs.

Key words: personality disorder, screening tool, validation, questionnaire

INTRODUCTION

Some 30 to 45% of psychiatric outpatients apparently suffer from PDs (Adel et al., 2006; Zimmerman et al., 2005). Early recognition of these frequently occurring PDs is extremely important, because these disorders can hinder the course and the treatment of psychiatric disorders, and serious psychosocial problems (Alnaes et al., 1997; Farmer et al., 2006; Shea et al., 1992). It is expected that an early identification of PDs can contribute to more effective treatment and better results.

As is known, the reliability of the clinical assessment in determining psychiatric disorders, including PDs, has often been found to be dubious (Spitzer et al., 1974). Attempts to identify this unreliability led to three sources of variance: information variance, observation and interpretation variance and criterion variance (Hodiamont, 1986; Rijnders, 2008; Ward, 1962). The publication of the Diagnostical and Statistical Manual-III (DSM-III) successfully cancelled out the criterion variance. By introducing the (training in) standardized clinical-psychiatric interviews, the information, observation and interpretation variances were reduced. The disadvantage of standardized clinical-psychiatric interviews is that they are often time-consuming, and always have to be conducted by experienced, well-trained professionals (Dingemans et al., 2004). To limit these disadvantages, a screening tool can be used.

The screening principle means that people are subjected to a 'quick and dirty test', to differentiate between those people who are likely to have a disorder, and those who in all likelihood do not. A screening test has a limited diagnostic value. A diagnosis is attained by a far-reaching procedure, which of course takes more time and expertise.

Questionnaires to be filled in by patients themselves do not take much of the clinician's time: no trained professional is required to conduct the questionnaire. The interviewer's observance and interpretation variance have been excluded; on the other hand, the respondent's interpretation variance plays a larger part. To minimize the criterion variance, it is important that the questionnaire to be filled in by patients themselves, is based on a standardized diagnostic system, such as the DSM-IV. An example of a questionnaire to be filled in by patients themselves is the SCID-II personality questionnaire. As far as we are aware, this questionnaire has not been validated for a Dutch psychiatric outpatients' population.

The purpose of this study was to compare the results of the SCID-II personality questionnaire with the results of the SCID-II interview and to assess if the SCID-II personality questionnaire is suitable as a screening tool for diagnosing PDs.

METHOD

Patients

The study was conducted in the GGZ-Midden Brabant [community mental health centre] in Tilburg, The Netherlands, which is now part of the GGz Breburg Group, with the approval of the Scientific Board for Middle Brabant and the Medical Ethics Board South Netherlands, within the scope of a broader study into screening tools for PDs. 86 patients were randomly selected from the entire group of outpatients that had been referred for intake to the GGz between October 2006 and January 2007. Exclusion criteria were: not or barely understanding the Dutch language, both orally and/or written, dyslexia, mental retardation, deafness, blindness, cerebral damage or the presence of a florid psychosis. Seven patients refused to participate or did not comply with the inclusion criteria. 79 patients (91.1%) gave their informed consent and completed the research protocol.

The average age of the patients was 34.3 years (SD=10.0 years). The population was 43% percent male (n=34), with an average age of 36.4 years (SD=10.2), and 57% female (n=54) with an average age of 32.7 years (SD=9.7). Of the patients referred, the reason for the referral was for 31.6 % (n=25) depression, for 22.8% (n=18) anxiety and panic, for 13.9% (n=11) relational problems, for 12.6% (n=10) probably a primary PD, for 7.6% (n=6) eating disorders, for 3.8% (n=3) obsessive-compulsive behavior, for 2.5% (n=2) substance abuse, for 2.5% (n=2) probably a disorder in the autistic spectrum, for 1.3% (n=1) kleptomania and for 1.3% (n=1) probably ADHD.

Material

SCID-II interview

The SCID-II interview is a semi-structured interview to determine regular PDs according to the DSM-IV-TR criteria, as well as passive-aggressive and depressive PDs, as stated in the appendix. The interview starts with a series of open questions, intended to provide the interviewer with insight into the behavior, the interpersonal relationships and the reflective abilities of the patient. Then there are 134 items with more structured questions, grouped around the specific PDs. In scoring these, the interviewer has to take into account the level of deviation, continuity and pervasiveness. In case of schizo-typical, schizoid, theatrical and narcissistic PDs, the interviewer is also required to take the patient's observed behavior into account.

A personality feature can be scored as: not present (1), present to a limited extent (2) or present (3). In scoring, not only the patient's answer to the question is important, but the interviewer has to take all available sources of information into account.

The reliability and the internal consistency of the SCID-II interview proves satisfactory (Maffei et. al. 1997), also for the Dutch population, with a Kappa (κ) of 0.63 (Weertman et al., 2000; Weertman et al., 2003).

To adequately conduct the SCID-II interview, the researcher (KH) was trained in the technical aspects of conducting an interview. This training was offered by the staff of the Regional Institute for Continuing Education and Training.

SCID-II personality questionnaire

The SCID-II personality questionnaire (Harcourt Test Publishers) questionnaire filled in by patients themselves, with 119 closed questions that match the questions in the SCID-II interview, where the introductory questions and the observation items have been removed. With affirmative or negative answers, the respondent him/herself determines whether the feature is present. International studies have shown that the SCID-II personality questionnaire, with 87% sensitivity and 75% specificity, is an adequate screening tool for PDs, as measured with the SCID-II interview (Ekselius et al., 1994). Similar data were found in the study conducted by Jacobsberg et al. (1995), where the SCID-II personality questionnaire was marked against the Personality Disorder Examination (PDE).

Procedure

If people have to answer similar questions on different occasions, the first study shall impact the results of the next study. To remove this effect, the research population was randomized into two groups. Group a (n=39), age 32.9 years (SD=10.3) first received the SCID-II personality questionnaire and then the SCID-II interview. In group b (n=40), age 35.6 (SD=9.8) the SCID-II interview was conducted first, and they then received the SCID-II personality questionnaire. At the time of conducting the SCID-II interview, the researcher was not aware of the results of the SCID-II personality questionnaire.

Table 1 gives the most significant demographic data of the entire population, as well as of the subgroups. There were no significant differences between both groups, except for their psychiatric history; in subgroup a 35.9% has a psychiatric history (half of those clinical patients), while in subgroup b 55% has a psychiatric history (47.5% of those as outpatients).

Table 1 *Demographic data of the study population*

Demographic data	Total frequency % (n=79)
Sex	
Men	43
Women	57
Marital status	
In a relation	59,5
Single	40,5
Highest completed education	
Low (LTS)	34,2
Moderate (MBO)	54,4
High (University)	11,4
Positive psychiatric history	
Outpatient	32,9
Clinical	12,7

Statistics and Analyses

In calculating the statistical data, the program SPSS, version 16.0 (SPSS Inc., Chicago, IL.) was used. The correlation between the interview and the personality questionnaire was corrected, using Cohen's Kappa. Sensitivity, specificity and the percentage of correctly identified patients was determined at different cut-off scores. Sensitivity means the number of true positives correctly identified with the test, compared to the standard test. Specificity refers to the number of true negatives correctly identified with the test. The percentage of correctly identified patients are the true positives as well as the true negatives.

RESULTS

Based on the SCID-II interview, in total 48.1% of the patients were shown to have a PD. No PDs of the Schizoid, the Schizotypical or the Histrionic type were found, and these are therefore not included in the results section. Within the group of patients with a PD, each patient complied with the criteria for on average 1.6 PDs. The frequency of the different PDs that were present varied from 3.8% (the Paranoid PD) to 20.3% (the Avoidant PD). No significant differences were found between the two subgroups.

When conducting the SCID-II personality questionnaire, with the standard cut-off score, 86.1% of the patients complied with the criteria for a PD. All PDs were found, in a frequency from 2.5% for the Histrionic PDs, to 55.7% for the Avoidant PDs.

Table 2 shows the sensitivity, specificity and percentage of correctly identified patients with the SCID-II personality questionnaire, for various cut-off scores.

Table 2 *Sensitivity, specificity and the power to predict personality disorder with the prescribed and the adapted cut-off scores*

Personality disorder	Cut-off score	Sensitivity (%)	Specificity (%)	Correctly classified (%)
Paranoid	Prescribed*	100	72.4	73.4
	Adapted**	66.7	97.4	96.2
Antisocial	Prescribed*	100	62.5	65.8
	Adapted**	85.7	90.3	89.9
Borderline	Prescribed*	100	52.2	58.2
	Adapted**	100	75.4	78.5
Narcissistic	Prescribed*	25.0	78.7	76.0
	Adapted**	0.0	94.7	89.9
Avoidant	Prescribed*	83.8	54.0	62.0
	Adapted**	31.2	795.2	82.3
Dependent	Prescribed*	50.0	91.8	88.6

Table 2 *(Continued)*

Personality disorder	Cut-off score	Sensitivity (%)	Specificity (%)	Correctly classified (%)
	Adapted**	0.0	100	92.4
Obs.-Comp.	Prescribed*	83.3	58.9	60.8
	Adapted**	16.7	97.3	91.1
Passive-Aggressive	Prescribed*	50.0	70.1	69.6
	Adapted**	0.0	98.7	96.2
Depressive	Prescribed*	87.5	60.6	63.3
	Adapted**	25.0	98.6	91.1
Any personality disorder diagnosis	Prescribed*	100	26.8	62.0
	Adapted**	71.1	78.1	74.7

Note:*original cut-off point as required by the questionnaire; **optimal cut-off point, increased with 3 items

To detect a patient with at least one PD, the SCID-II personality questionnaire, using the prescribed, diagnostically-specific cut-off scores, achieves a sensitivity of 100% and a specificity of 26.8%. When, for each diagnosis separately, the specific cut-off score on the questionnaire was increased, the balance between sensitivity and specificity improved. An increase of +3 proved the perfect balance, with a sensitivity of 71.1% and a specificity of 78.1%. As a result, the number of correctly identified patients increased from 62.0% to 74.4%.

Table 3 gives the frequency for a PD diagnosis.

Table 3 *Frequency of personality disorders scored in numbers using the SCID-II and the SCID-II Questionnaire with different adapted cut-off scores*

Personality disorder	SCID-II	SCID-II Q	SCID-II Q+1	SCID-II Q+2	SCID-II Q+3	SCID-II+4
Paranoid	3	24	18	11	4	1
Antisocial	7	34	28	19	13	12
Borderline	10	43	34	28	27	20
Narcissistic	4	17	11	7	4	1
Avoidant	16	44	26	15	8	0
Dependent	6	9	6	1	0	0
Obs.-Comp.	6	35	17	9	3	0
Passive-Aggressive	2	24	10	3	1	0
Depressive	8	35	25	13	3	0
Any personality disorder diagnosis	38	68	57	42	36	25

Table 3 is listed how often a PD is scored using the SCID II, SCID-II Personality Questionnaire (abbreviated here with SCID-II Q) and the SCID-II Personality Questionnaire with adjusted cut-off of 1, 2, 3 or 4 points (abbreviated here with +1, +2, +3, +4).

In the personality questionnaire, the frequency of all PDs appears to be overestimated, if the standard cut-off score is used. At the optimum cut-off score (+3), this overrating diminishes in size and is limited to the Paranoid, the Schizotypical, the Antisocial and the Borderline PDs. The Avoidant, the Dependent, the Obsessive-Compulsive, the Passive-Aggressive and the Depressive PDs, however, are underestimated if the modified cut-off score (+3) is used.

Table 4 gives the Kappa's for the SCID-II interview and the SCID-II personality questionnaire.

The compliance between both tools for the presence, or not, of a PD was 0.26 at the standard cut-off score and 0.45 at the modified cut-off score (+3).

Table 4 *The Kappa between SCID-II and the SCID-II Personality Questionnaire with and without adapted cut-off points (1, 2, 3, 4)*

Personality disorder	Kappa	Kappa +1	Kappa+2	Kappa+3	Kappa+4
Paranoid	0.16	0.24	0.39	**0.55**	0.49
Antisocial	0.23	0.30	0.47	**0.55**	0.59
Borderline	0.22	0.32	0.42	**0.44**	0.44
Narcissistic	0.01	0.06	-0.07	-0.05	-0.02
Avoidant	0.29	0.49	0.48	0.33	n.v.t.
Dependent	0.34	0.46	0.27	n.v.t.	n.v.t.
Obs.-Comp.	0.13	-0.03	0.05	0.18	n.v.t.
Passive-aggressive	0.03	0.13	-0.03	-0.02	n.v.t.
Depressive	0.19	0.32	0.40	0.33	n.v.t.
Any personality disorder diagnosis	0.26	0.33	0.44	**0.45**	0.36

Note: In bold the optimal cut-off score with the highest kappa

DISCUSSION

The purpose of this study was to determine the screening capacity of the SCID-II personality questionnaire. The results show a moderate screening capacity with modified cut-off scores with a sensitivity of 71.1%, a specificity of 78.1% and a number of correctly identified patients of 74.7%. However, the kappa is too low even when the cut-off score is modified (0.45).

The results show that when the personality questionnaire is used with the standard cut-off score, the frequency of all PDs is overestimated, with a sensitivity of 100% and a specificity of 26.8%. The personality questionnaire's screening capacity improved significantly, if the specific

cut-off score was increased for each diagnosis, separately. An optimum result was achieved with an increase of +3, when the percentage of correctly identified patients increased from 62.0% to 74.7%. The kappa of 0.45 with the optimum cut-off score has to assessed as moderate.

Research of the literature shows that few studies have been conducted about the screening capacity of the SCID-II personality questionnaire. We found one study with a similar structure, where Ekselius et al. (1994) also found that the questionnaire was over-inclusive. With the standard cut-off score, this study found similar sensitivity and specificity. After increasing the cut-off scores by 1 point, they achieved a sensitivity of 86.5% and a specificity of 75.0%, whereby the relationship between these two still indicates that the questionnaire still overestimates.

The restriction of the study is that it was conducted with an, albeit it representative (Germans et al., 2008: Masthoff et al., 2006) but small sample group, which means that PDs with a low outpatients' prevalence were not or not adequately represented. Further research with a larger group remains necessary.

In conclusion, we recommend restraint in using the SCID-II personality questionnaire as a screening tool. If the decision is made to use this questionnaire, it is recommended to use this with modified cut-off scores. It also has to be considered, on a case-by-case basis, if a better alternative is available, e.g. the Self-report Standardized Assessment of Personality–Abbreviated Scale (SAPAS-SR; Germans et al., 2008), where sensitivity and specificity of respectively 80% and 83% were found, and the Iowa Personality Disorder Screen (IDPS; Germans et al., 2010), with similar results (sensitivity of 77% and specificity of 85%). It is clear that these shorter questionnaires have a better proven screening capacity than the sizeable SCID-II personality questionnaire.

REFERENCES

Adel, A., Grimm, G., Mogge, N.L., et al. (2006). Prevalence of Personality Disorders at a Rural State Psychiatric Hospital. *Journal of Rural Community Psychology,* Vol.E9, Nr.1, Spring 2006.

Alnaes, R., & Torgersen, S. (1997). Personality and Personality Disorders predict development and relapses of major depression. *Acta Psychiatrica Scandinavica, 95*,336–342.

Dingemans, P.M.A.J., & Sno, H.N. (2004). Meetinstrumenten bij persoonlijkheidsstoornissen. *Tijdschrift voor Psychiatrie 46*,705-709.

Ekselius, L., Lindstrom,E., Von Knorring, L., et al. (1994). SCID II interviews and the SCID Screen questionnaire as diagnostic tools for personality disorders in DSM-III-R. *Acta Psychiatrica Scandinavica, 90*, 120-123.

Farmer, R.F., & Nelson-Gray, R.O. (1990). Personality Disorders and Depression: Hypothetical Relations, Empirical Findings, and Methodological Considerations. *Clinical Psychology Review, 10*,453–476.

Germans, S., Van Heck, G.L., Langbehn, D.R., & Hodiamont, P.P.G. (2010). The Iowa Personality disorder screen (IPDS): Preliminary results of the validation of a self-administered version in a Dutch population. *European Journal of psychological assessment, 26,*11-18.

Germans, S., Van Heck, G.L., Moran, P., & Hodiamont, P.P.G. (2008). The Self-report Standardized Assessment of Personality –abbreviated Scale: Preliminary results of a brief screening test for personality disorders. *Personality and Mental Health, 2,* 70-76.

Hodiamont, P.P.G. (1986). Het zoeken van zieke zielen. *Academisch proefschrift. Katholieke* Universiteit Nijmegen.

Jacobsberg, L., Perry, S., & Frances, A. (1995). Diagnostic agreement between the SCID-II screening questionnaire and the Personality Disorder Examination. *Journal of Personality Assessment*, *65*,428-433.

Maffei, C., Fossati, A., Agostoni, I. et al. (1997). Interrater reliability and internal consistency of the structured clinical interview for DSM-IV axis II personality disorders (SCID-II), version 2.0. *Journal of Personality Disorders, 11*,279-284.

Masthoff, E.D.M., & Trompenaars, A.J.W.M. (2006). *Quality of life in psychiatric outpatients.* Doctoral Dissertation. Tilburg, The Netherlands: Tilburg University.

Newton-Howes, G., Tyrer, P., & Johnson, T.(2006). Personality Disorder and the Outcome of Depression: Meta-Analysis of Published Studies. *British Journal of Psychiatry, 188*,13-20.

Shea, M.T., Widiger, T.A., & Klein, M.H.(1992). Comorbidity of personality disorders and depression: implications for treatment. *Journal of Consulting and Clinical Psychology, 60*, 857–868.

Spitzer, R.L. & Fleiss, J.L. (1974). A re-analysis of. the reliability of psychiatric diagnosis. *British Journal of Psychiatry, 125*, 341–347.

Weertman, A., Arntz, A., & Dreessen, L. (2003). Short-interval test-retest interrter reliability of the Dutch version of the Structured Clinical Interview for DSM-IV personality disorders (SCID-II). *Journal of Personality disorders*, *17*, 562-567.

Weertman, A., Arntz, A., & Kerkhofs, M.L.M. (1997). Gestructureerd Klinisch Interview voor de DSM-II Persoonlijkheidsstoornissen (Structured Clinical Interviez for the DSM-III Personality disorders). *Swets Test Publisher*, 5-15.

Zimmerman, M., Rothschild, L., & Chelminski,I. (2005). The Prevalence of DSM-IV Personality Disorders in Psychiatric Outpatients. *American Journal of Psychiatry, 162*, 1911–1918.

PART B

Categorical interview screeningsinstrument

Chapter 6

The Quick Personality Assessment Schedule (PAS-Q): Validation of a brief screening test for personality disorders in a population of psychiatric outpatients

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Australian and New Zealand Journal of Psychiatry, in press

ABSTRACT

Objective: The internal consistency, test-retest reliability, and validity of the Quick Personality Assessment Schedule (PAS-Q), as a screening instrument for personality disorders were studied in a random sample of 195 Dutch psychiatric outpatients, using the SCID II as a gold standard.

Method: All patients were interviewed with the PAS-Q. With an interval of 1 to 2 weeks, they were interviewed with the SCID-II. Three weeks later the PAS-Q was re-administered.

Results: According to the SCID II, 97 patients (50 percent) were suffering from a personality disorder. The PAS-Q correctly classified 81 percent of all participants. Sensitivity and specificity were 0.80 and 0.82, respectively.

Conclusion: The results provide evidence for the usefulness of the PAS-Q as screening instrument for personality disorders in clinical populations.

Key words: personality disorders; screening instrument, validity

INTRODUCTION

Since the presence of personality disorder (PD) can adversely affect the quality of life of persons as well as the management of mental illnesses (Moran et al, 2003; Newton Howes, Tyrer, & Johnson, 2006), assessment of the personality status of patients should be an essential part of every psychiatric examination. Although not perfect (Zimmerman, 1994), standardized clinical interviews are generally considered to be the most reliable and valid methods available for the assessment of PDs. However, performing such interviews are often rather time consuming. Self-report questionnaires can be useful tools, particularly when employed as part of a two-stage procedure for case identification. Self-report questionnaires, on the other hand, may have relatively poor specificity and may be rather tiring for patients due to the fact that they require the ability to concentrate on, often rather lengthy, lists of written questions. As a compromise, one could conduct a brief structured interview. Recently, several short structured interviews have been developed. Moran et al. (2003), for instance, have constructed such a brief interview for the screening of PD: the Standardised Assessment of Personality - Abbreviated Scale (SAPAS). This interview consists of eight *yes-no* items, taken from the opening section of an informant-based semi-structured interview, the Standardised Assessment of Personality (SAP; Mann et al., 1981; Mann et al., 1999). Langbehn et al.(1999) have developed the Iowa Personality Disorder Screen (IPDS), which can be completed within five minutes. The IPDS consists of 11 items derived from the DSM-III version of the Structured Interview for DSM-III Personality Disorders (SIPD; Stangl, Pfohl, Zimmerman, Bowers, & Corenthal, 1985). These items correspond to specific DSM symptoms of particular PD diagnoses.

Van Horn, Manley, Leddy, Cicchetti, and Tyrer (2000) introduced a structured interview, the Rapid Personality Assessment Schedule (PAS-R). The PAS-R is an abbreviated form of the original Personality Assessment Schedule (PAS; Tyrer, 2000), measuring eight ICD PDs and their main characteristics. The PAS is an extensively used standardized assessment instrument for PDs with adequate psychometric qualities (Tyrer, Strauss, &Cichetti, 1983; Tyrer, & Selvewright, 1988). Each disorder can be scored on a three-point scale ranging from 0-2, where 0 refers to the absence of any dysfunction associated with personality traits, 1 to personality difficulty, and 2 to PD. Although the PAS-R performs moderately well as a screening instrument, it requires specific training and still takes more than 15 minutes to complete.

Another screening instrument, developed by the same authors, is the Quick Personality Assessment Schedule (PAS-Q; Tyrer, 2000). This is a shortened version of the ICD-10 version of the PAS, which takes about a quarter of an hour to complete. It can be used with clients as well as informants. The PAS-Q interview starts with open questions about character and personality traits, interpersonal relationships, job performance, drug problems and law breaking behavior, followed by eight specific sections with relevancy for PDs: Suspiciousness & Sensitivity, Aloofness & Eccentricity, Aggression & Callousness, Impulsive & Borderline, Childishness & Lability, Conscientiousness & Rigidity, Anxiousness & Shyness, and Resourcelessness & Vulnerability. To

identify a certain PD in each section, there are two screening questions. Positive answers to these questions lead to probing questions and eventually to scoring the characteristics in question. The interviewer assesses the severity of the PD in every section, taking into account the answers to the introductory questions, the specific questions, and available background information.

The PAS-Q, distinguishing four levels of severity: 0 (*no PD*), 1 (*personality difficulty*), 2 (*simple PD*), 3 (*diffuse or complex PD*). Table 1 presents the associations between the eight-PAS-Q sections, the corresponding ICD-10 categories, as well as a 'translation' into the DSM-VI-TR classification system.

Table 1 *PAS-Q sections translated into ICD-10 PD and DSM-IV-TR PD classification*

The nine PAS-Q personality types classified into 8 sections	ICD-10 PD	DSM-IV-TR PD
A. Suspiciousness & Sensitivity	Paranoid	Paranoid
B. Aloofness & Eccentricity	Schizoid	Schizoid
C. Aggression & Callousness	Dissocial	Antisocial
D. Impulsive	Emotionally unstable PD, Impulsive type	Borderline
D. Borderline	Emotionally unstable PD, Borderline type	Borderline
E. Childishness & Lability	Histrionic	Histrionic
F. Conscientiousness & Rigidity	Anankastic	Obsessive-Compulsive
G. Anxiousness & Shyness	Anxious	Avoidant
H. Resourcelessness & Vulnerability	Dependent	Dependent

The present study focuses on the PAS-Q. Examination of this instrument is part of a larger research project aiming at the evaluation of a wide range of screening instruments for PDs (Germans et al., 2008; Germans, Van Heck, Langbehn et al., 2010; Germans, Van Heck, Masthoff, 2010; Hilderson, in press). In this context the PAS-Q was included, based on the following considerations. First, the PAS-Q is based on the universally accepted ICD-10 categories, in contrast to the majority of other available screening instruments, which are predominantly grounded in the DSM classification system. Furthermore, the PAS-Q not only focuses on the prediction of *any* PD, like the majority of available screening instruments do, but provides also the opportunity for more specific prognoses of distinct PDs. Finally, the response scales of the PAS-Q are not limited to scoring for *absence-presence*, but allow more nuances reflecting the level of severity. We choose the SCID-II as the gold standard for testing the PAS-Q for two reasons. First, the SCID-II is internationally the best known and most widely used interview for diagnosing PDs in terms of DSM-IV. Second, the SCID-II, because of its different background, provided a much more independent criterion for judging the psychometric qualities of the PAS-Q, compared with the use of the PAS, as tested in the past. Therefore, the objective of the present article was to validate the PAS-Q in a population of Dutch psychiatric outpatients with the SCID-II as the 'gold standard'.

MATERIALS AND METHODS

Participants

The study was performed at GGZ-Midden Brabant, a large Community Mental Health Centre in the city of Tilburg, the Netherlands, after approval by the Regional Medical Ethical Committee. From the total group of persons (N=2116) referred to this centre between March 2004 and March 2005, approximately 10 % (N=207) were randomly recruited.

Measures

The PAS-Q

Since no Dutch version of this instrument was available at the time of this study, the original version of the PAS-Q initially was translated into Dutch by the authors and thereafter translated back into English by the Translation Centre of Tilburg University. The result of the latter translation was nearly identical to the original version.

SCID-II

The SCID-II (First et al., 1995; Dutch version: Weertman, Arntz, & Kerkhofs, 1997) is a semi-structured interview for the assessment of PDs, which covers the ten PDs listed in the DSM-IV (APA, 1994) as well as the passive-aggressive and the depressive PD, both listed in the appendix of the DSM-IV. The SCID-II interview contains two parts. The first part consists of eight open questions on the patient's general behaviour, interpersonal relationships, and self-reflective abilities. The second part has 140 items to be scored as 1 (*absent*), 2 (*sub-threshold*), or 3 (*threshold*). The SCID-II interview is primarily designed to make a categorical diagnosis of PD. The inter-rater reliability and internal consistency of the SCID-II interview are adequate (Maffei et al., 1997). The inter-rater reliability for the presence or absence of any PD of the Dutch version is *fair* to *good* (Weertman et al., 2003). Before undertaking fieldwork for this study, the first author (S.G.) was formally trained in the use of the SCID-II.

Procedure

The PAS-Q was completed as a short interview during the initial clinical appointment. The SCID-II interview, took place one to two weeks after the PAS-Q. The PAS-Q was repeated two to three weeks after the initial PAS-Q interview. For practical reasons all participants were interviewed by the same person (S.G.) who refrained from reviewing the results of the previous interviews in the patients' file.

Analysis

All statistical analyses were performed with SPSS version 12 (SPSS Inc., Chicago, IL). The internal consistency of the PAS-Q was examined by calculating Cronbach's alpha (Cronbach,

1951). Cronbach's alphas will generally increase when the correlations between the items of a scale increase (Schmitt, 1996). As a rule of thumb, usually a reliability of 0.70 or higher is required [e.g., Nunnaly, 1978). According to Bland and Altman (1997), coefficients of 0.70 to 0.80 can be conceived of as satisfactory. The guidelines outlined by Cicchetti (1994) are good criteria to determine clinical significance. According to these guidelines, alpha values should be interpreted as *poor* (< 0.70), fair (0.70 to 0.79), *good* (0.80 to 0.89), or *excellent* (> 0.90). However, one should keep in mind that the appropriate degree of reliability also depends upon the intended use. An assessment instrument designed for screening purposes is intentionally constructed as a short instrument, at the cost of a somewhat lower reliability, as Cronbach's alpha is not only dependent on the magnitude of the correlations among items, but also on the number of items of the scale (Schmitt, 1996; Streiner &Norman, 1989). In this light, we propose a somewhat more lenient approach, in which coefficients exceeding 0.60 are considered satisfactory. This more lenient evaluation, however, should not close the eyes for the fact that such measures with a short test length have rather low reliability. Consequently, it speaks for itself that estimates of relationships with other variables will be attenuated (Schmitt, 1996).

The test-retest reliability of each item and the overall score were estimated using Pearson correlation coefficients. Furthermore, the dimensionality of the PAS-Q was examined using factor analysis. The effect of changes in the cut-off score on the PAS-Q in predicting a SCID-II (DSM-IV) diagnosis of PD was examined using receiver operating characteristic (ROC) analysis. To assess the sensitivity and specificity of the various cut-off scores, a sensitivity and specificity plot was constructed.

RESULTS

Although initially all recruited persons gave informed consent to participate (N=207), 12 of them (5.8 %; 8 men, 4 women, mean age = 33.0 years) did not return after their first assessment and were, therefore, excluded. The study group (N=195) consisted of 112 women (57.4%) and 83 men (42.6%). Mean age was 32.7 years (SD=8.9). Primary reasons for psychiatric referral were: anxiety problems (N=62; 31.8%), affective problems (N=29; 14.9%), conduct disorders (N=33; 16.9%), partner-relational problems (N=23; 11.8%), somatic problems (N=12; 6.2%), labour or school problems (N=10; 5.1%), identity problems (N=7; 3.6%), social problems (N=4; 2.1%), addiction problems (N=1; 0.5%), and cognitive problems (N=2; 1.0%). No specific psychiatric problem was mentioned by the referring physician in the case of five patients (2.5%).

A total of 97 of the 195 patients received, according to the SCID-II, a PD diagnosis, yielding a PD prevalence of 50%. In the group of patients with at least one PD, the mean number of PDs was 1.8 (SD = 0.87). Table 2 presents the number of patients with a particular cluster of PD, according to the SCID-II and the PAS-Q. This table shows that 83.1 % of the patients had a hit and 19.9 % of the patient had a no-hit with the PAS-Q.

Table 2 *Number of patients with one or more PDs, according to the SCID-II and the PAS-Q*

Personality disorders	SCID-II	PAS-Q	
		Hit	No-Hit
Cluster A			
Total Cluster A	8	5(62.5%)	3(37.5%)
Cluster B			
Total Cluster B	83	67(80.7%)	16(19.3%)
Cluster C			
Total Cluster C	62	54(87.1%)	8(12.9%)
Cluster NAO			
Total Cluster NAO	19	17(89.5%)	2(10.5%)
Overall total	172	143 (83.1%)	29 (16.9%)

Note: Hit = true positive; No-Hit = false negative. If a patient met SCID-II criteria for more than one personality disorder, he/she is listed for all diagnosed personality disorders.

Table 3 shows the Cronbach alpha coefficients for the scale if the information for the particular section is deleted, test-retest outcomes, and the corrected item-total correlation coefficients.

Table 3 *Internal consistency, test-retest, phi, and corrected total correlation coefficients for items of the Quick Personality Assessment schedule (PAS-Q)*

Sections	Alpha coefficient if item is deleted	Test-retest correlation coefficients	Corrected item-total correlation
A. Suspiciousness & Sensitivity	0.30	1.00	0.20
B. Aloofness & Eccentricity	0.34	0.92	0.10
C. Aggression & Callousness	0.30	1.00	0.18
D. Impulsive	0.27	0.99	0.22
D. Borderline	0.16	1.00	0.38
E. Childishness & Lability	0.32	1.00	0.14
F. Conscientiousness & Rigidity	0.47	0.98	-0.19
G. Anxiousness & Shyness	0.33	0.98	0.12
H. Resourcelessness & Vulnerability	0.32	0.99	0.13

The latter coefficients reflect the correlation between scores on a particular PAS-Q section and the rest of the PAS-Q scale without that section considered part of the scale. If a correlation is low for a particular section, this means that the section is not really measuring the same thing, which the rest of the scale is trying to assess. The test-retest coefficient for the total score is 0.92. Test-retest reliability of items was high, with the section 'Aloofness & Eccentricity' showing the lowest, and the sections 'Aggression & Callousness', 'Borderline' and 'Childishness & Liability' the highest stability across time.

The overall internal consistency, as expressed in the Cronbach alpha coefficient for the total PAS-Q scale, was 0.35. Internal consistency coefficients were low, ranging from 0.16 for section D 'Borderline' to 0.47 for the section F 'Conscientiousness & Rigidity'. The moderate alpha coefficients suggested a rather high heterogeneity of the sections. Therefore, a factor analysis was performed. The idea behind this analysis is that the number of factors that has to be extracted reflects the degree of heterogeneity and will reveal whether PD can best be conceived of as a one-dimensional concept or a complex of related but to a certain extent rather independent dimensions. Principal components extraction with oblimin rotation was performed on the nine PAS-Q personality types. Three factors were extracted based on the criterion of eigenvalues greater than 1.0 (eigenvalues: 2.63, 1.61, 1.25, 0.84, 0.83, 0.67, 0.50, 0.40, 0.28) and inspection of the Scree test (Cattel, 1966). Inter-correlations among the components ranged from 0.12 (F_1 with F_3) to 0.60 (F_3 with F_1). The pattern matrix of unique relationships between each factor and each observed variable, uncontaminated by overlap among factors, revealed a clustering of the nine items in three groups, reflecting the heterogeneity of items. The three factors explained 60.9 % of the total variance. The loadings of the variables on the factors are shown in Table 4.

Table 4 *Factor loadings for principal components extraction and oblimin rotation on the PAS-Q sections*

PAS-Q sections	Component		
	1	2	3
PAS-Q section D. (Impulsive)	**0.87**		
PAS-Q section D. (Borderline)	**0.86**		
PAS-Q section C.(Aggression & Callousness)	**0.70**		
PAS-Q section F.(Conscientiousness & Rigidity)	**-0.50**		
PAS-Q section H.(Resourcelessness & Vulnerability)		**0.83**	
PAS-Q section G.(Anxiousness & Shyness)		**0.71**	-0.36
PAS-Q section E.(Childishness & Lability)	0.32	**0.50**	0.40
PAS-Q section B.(Aloofness & Eccentricity)			**-0.73**
PAS-Q section A.(Suspiciousness & Sensitivity)	0.33		**-0.73**

Note: only factor loadings > +/- 0.30 are presented. Factor loadings of items belonging to each of three factors are printed in bold.

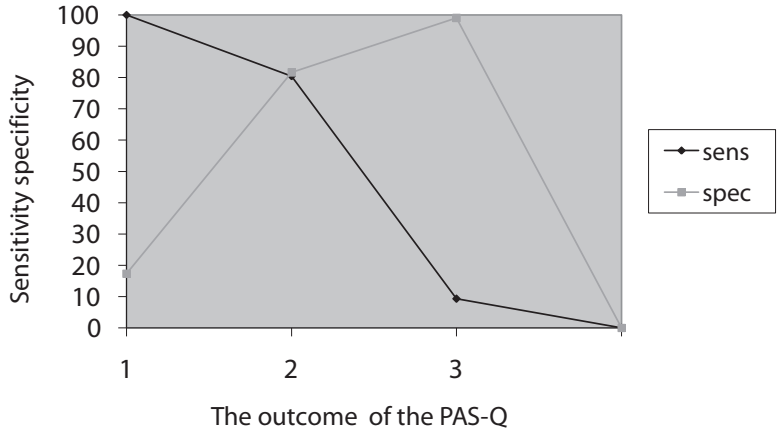
Factor 1 (F_1) shows positive connections between Aggression, Impulsiveness and Borderline and a negative connection with Conscientiousness and Rigidity (Cluster B). Factor 2 (F_2) features Resourcelessness Vulnerability, Anxiousness, and Shyness (Cluster C). Factor 3 (F_3) represent Cluster A: Aloofness, Eccentricity, Suspiciousness, and Sensitivity. The internal consistency, as expressed in the Cronbach alpha coefficients for the three subsets of PAS-Q items, were 0.43 for the four items reflecting F_1 0.50 for the three items assessing F_2, and 0.40 for the two items representing F3. The effect of changing cut-off score on the PAS-Q in predicting a SCID-II (DSM-IV) diagnosis of PD was examined using a Receiver Operating Characteristic (ROC) analysis. The ROC-curve had an area-under-the curve of 0.83 (95% CI: 0.77-0.89). The performance of the PAS-Q at different cut-off scores was assessed by reference to the sensitivity, specificity, and predictive values (Table 5).

Table 5 *Sensitivity, specificity, and the power to predict personality disorder at different cut- off scores of the Quick Personality Assessment schedule (PAS-Q)*

PAS-Q cut- off score	Sensitivity	Specificity	Positive predictive value	Negative predictive value	Correctly classified (%)
1	100	17.35	5.1	100	58.46
2	80.4	81.6	81.3	80.8	81.03
3	9.3	99	90	52.43	54.36

To assess the sensitivity and specificity for various cut-off scores, a sensitivity and specificity plot was constructed (Figure 1).

Figure 1 *Sensitivity –Specificity plot relating the Structured Clinical Interview for DSM-IV Personality disorders positive diagnosis to total score on the Quick Personality Assessment schedule (PAS-Q)*



This plot revealed that the optimal PAS-Q cut-off score for a SCID-II based diagnosis of PD was 2. This cut-off score not only correctly classified 81 % of the patients; it also resulted in the best balance of sensitivity (0.80) and specificity (0.82). These outcomes are based on the first PAS-Q interview data, analyses based on the data of the second PAS-Q interview were highly similar and not significant different. In case of the original PAS-Q interview the same cut-off score was proposed: the score 1 points at the existence of personality problems and scores 2 and higher mean PD.

DISCUSSION

Performance of the PAS-Q

The PAS-Q correctly identified the presence of PD in 81 % of cases. Its low overall consistency should not be interpreted as an indication that the PAS-Q is a poorly performing test. The low homogeneity of the nine sections suggests that this particular set of items may have several latent attributes. The lack of interrelatedness of the items suggests that the content of the PAS-Q is multifaceted and this in turn, is likely to reflect the heterogeneous content of the concept 'personality disorder'. The fact that the PAS-Q is not a one-dimensional instrument that measures only one concept with a strong internal structure is also supported by the outcomes of the factor analysis, which clearly identified three distinct factors. It is quite remarkable that these factors represent fairly well the three clusters of PD (A,B, and C).

The findings should be interpreted in the light of a number of limitations.

First, because of the dependence on disease prevalence, screening for disease in low-prevalence populations yields few positive test results (Gray, 2002). While the prevalence of PDs in the present sample of psychiatric patients was 50%, this prevalence will undoubtedly be lower in the general population, yielding a lower positive predictive value for the PAS-Q in this setting and it remains to be seen how well the PAS-Q perform in community samples.

Second, the use of the SCID-II as the criterion in this study could be questioned. However, the SCID-II is widely used across the world and its properties are well established.

Finally, the fact that the PAS-Q and the SCID-II were not done by separate, independent interviewers could be a source of bias. We are aware that this procedure, forced by practical considerations reflecting the institute's daily clinical practice, does not represent the best possible design. However, we feel that the risk of bias is presumably low due to the fact that the number of interviewees was rather high, the time intervals were not short and no inspection of patients' records in preparation of the interviews took place. Moreover, the fact that the correspondence between both PAS-Q and the SCID-II interviews were similar provides also a convincing argument for the relative absence of bias. Nevertheless, future research should eliminate this possible source of bias completely by using independent interviewers.

CONCLUSION

The PAS-Q could be used to identify individuals at risk for having any type of PD in the context of general adult psychiatry. It should be admitted that there is still room for improvement with respect to the usefulness of the PAS-Q for establishing a clinical diagnosis of a PD. Nevertheless, it can be concluded that a hit of 83.1% is not bad at all. Thus, the PAS-Q can be used successfully as a first step in a two-stage procedure for case identification.

Patients with a score of 2 or higher on the PAS-Q should be interviewed with a detailed (semi)-structured interview for PDs. Clinicians and researchers might wish to adopt higher or lower thresholds, depending on the nature of the sample and the relative importance of sensitivity and specificity.

REFERENCES

American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders (fourth edition) (DSM-IV). Washington (DC): APA; 1994.

Bland, J.M., & Altman, D.C. (1997).Cronbach's alpha. *British Journal of Medicine*, 314: 572.

Cattell, R.B.(1966) The Scree test for the number of items. *Multivariate Behavioral Research*, *1,*140-161.

Cicchetti, D. (1994). Guidelines, criteria, and rules of thumb for evaluating normed and standardized assessment instruments in psychology. *Psychological Assessment*, *6*, 284-290.

Cronbach, L.J.(1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, *16*,

297-334.

First, M.B., Spitzer, R.L., Gibbon, M., et al. (1995). The structured clinical interview for DSM-III-R Personality Disorders (SCID-II): Part I: Description. *Journal of Personality Disorders, 9,*92-104.

Germans, S., Van Heck, G.L., Moran, P., & Hodiamont, P.P.G.(2008). The Self-report Standardized Assessment of Personality-abbreviated Scale: Preliminary results of a brief screening test for personality disorders. *Personality and Mental Health, 2*, 70-76.

Germans, S., Van Heck, G.L., Langbehn, D.R., & Hodiamont, P.P.G. (2010). The Iowa

Personality Disorder Screen (IPDS): Preliminary results of the validation of a self-administered version in a Dutch population. *European Journal of Psychological Assessment*, *26*, 11-18.

Germans, S., Van Heck, G.L., Masthoff, E.D., Trompenaars, F.J.M., & Hodiamont, P.P.G.(2010). Diagnostic efficiency among psychiatric outpatients of a self-report version of a subset of screen items of the structured Clinical Interview for DSM-IV-TR Personality Disorders (SCID-II). *Psychological Assessment*, *22*, 945-952.

Gray, G.E. (2002). Evidence-based medicine: An introduction for psychiatrists. *Journal of Psychiatric Practice*, *8*, 5-13.

Hilderson, K.M.I., Germans, S., Rijnders, C.A.Th, Van Heck, G.L., &Hodiamont, P.P.G.Validatie van de SCID-II persoonlijkheidsvragenlijst binnen een poliklinische psychiatrische populatie. *Psychopraktijk,* in press

Langbehn, D.R., Pfohl, B.M., Reynolds, S., et al.(1999). The Iowa Personality Disorder Screen:Development and preliminary validation of a brief screening interview. *Journal of Personality Disordorders*, *13*,75-89.

Maffei, C., Fossati, A., Agostoni, I., et al.(1997). Interrater reliability and internal consistency of the structured clinical interview for DSM IV axis II personality disorder (SCID II) version 2.0. *Journal of Personality Disorders, 11*,85-92.

Mann, A.H., Jenkins, R., Cutting, J.C., et al. (1981). The development and use of a Standardized Assessment of abnormal Personality. *Psychological Medicine*, *11*,839-847.

Mann, A.H., Raven, P., Pilgrim, J., et al.(1999). An assessment of the Standardized Assessment of Personality as a screening instrument for the international personality examination: A comparison of informant and patient assessment for personality. *Psychological Medicine, 29*,985-989.

Moran, P., Leese, M., Lee, T., et al.(2003). Standardised Assessment of Personality-Abbreviated Scale (SAPAS): Preliminary validation of a brief screen for personality disorder. *British Journal of Psychiatry*, *183*,228-232.

Moran, P., Walsh, E., Tyrer, P., et al.(2003). The impact of co-morbid personality disorder on violence in psychosis – data from the UK700 trial. *British Journal Psychiatry*, *182*,129-134.

Newton-Howes, G., Tyrer, P., & Johnson, T.(2006). Personality disorder and the outcome of depression: Meta-analysis of published studies. *British Journal of Psychiatry*, *188*,13-20.

Nunnaly, J.C. (1978). *Psychometric theory* (1st ed.) New York: McGraw-Hill.

Schmitt, N. (1996).Uses and abuses of coefficient alpha. *Psychological Assessment*,8, 350-353.

Stangl, D., Pfohl, B., Zimmerman, M., Bowers, W., & Corenthal, C. (1985). A structured interview for the DSM-III personality disorders. *Archives of General Psychiatry*, *42*,591-6.

Streiner, D.L.,& Norman, G.R. (1989).*Health measurement scales. A practical guide to their development and use*. New York, NY: Oxford University Press, Inc.

Tyrer, P. (2000). Personality Assessment Schedule: PAS-I (ICD-10 version). In P. Tyrer (eds.), *Personality disorders: diagnosis, management and course* 2nd edition (pp 160-180). London: Arnold.

Tyrer, P., Strauss, J., & Cicchetti, D. (1983). Temporal reliability of personality in psychiatric patients. *Psychological Medicine*, 13, 393-398.

Tyrer, P., & Selvewright, H. (1988). Studies of outcome. In Personality disorders, P.Tyrer, editor.Wright. pp 119-137.

Tyrer, P. (2000). Quick Personality assessment Schedule: PAS-Q. In P. Tyrer (eds.), *Personality disorders: diagnosis, management and course* 2nd edition (pp181-190). London: Arnold.

Van Horn, E., Manley, C., Leddy, D., et al.(2000). Problems in developing an instrument for the Rapid Assessment of Personality Status. *European Psychiatry*.15 (suppl. 1); 29-33.

Weertman, A., Arntz, A., Dreessen. L. et al.(2003). Short-interval test-retest interrater reliability of the Dutch version of the Structured Clinical Interview for DSM-IV Personality Disorders (SCID-II). *Journal of Personality Disorders*.17,562-567.

Weertman, A., Arntz, A., & Kerkhofs, M.L.M. (1997). Gestructureerd klinisch interview voor de DSM-III persoonlijkheidsstoornissen [Structured Clinical Interview for the DSM-III personality disorders]. Swets Test Publisher, 5-15.

Zimmerman, M. (1994). Diagnosing personality disorders: A review of issues and research methods. Archives of General Psychiatry, 51,225-245.

PART C

Dimensional self-report screeningsinstruments

CHAPTER 7

Screening for Personality Disorders: A Comparison of the dimensional NEO-FFI with the categorical SAPAS-SR.

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ABSTRACT

Objective: In psychiatric outpatients, the usefulness of the dimensional NEO-FFI as a screening instrument for personality disorders (PDs) was compared with the categorical screening instrument SAPAS-SR using the SCID-II as the gold standard. Major research questions are: (i) is the NEO-FFI a useful screening instrument for PDs?; (ii) does the NEO-FFI outperform a categorical screening instrument (SAPAS-SR);(iii) does combining both instruments improve the screening results

Method: Extreme raising on Big Five personality trait domains (NEO-FFI) domain scores were examined in relation to the presence and the number of PDs as diagnosed, with to the SCID-II. Additionally, the NEO-FFI, in conjunction with a short self-report screening instrument (SAPAS-SR), was analysed with respect to sensitivity and specificity for screening of PDs.

Results: According to the SCID II, 97 patients (50%) were suffering from a PD. The majority of them had no (35.9%) or only one (40%) extreme score on one of the Big Five personality domains. There were no significant relationships between separate extreme traits on PD or five factor profiles, as proposed in the literature, and the presence of a SCID-II PD. Comparisons of the NEO-FFI with the SAPAS-SR showed no significant relationships.

Using both screeners in conjunction resulted in an increase in specificity and the number of correctly classified cases at the expense, however, of the sensitivity. Correlation and regression analyses showed that personality traits are statistically significant predictors for each of the12 PDs. However, the associations between NEO-FFI scores and the DSM-VI-TR PD criteria were rather modest.

Conclusion: Support could not be obtained for the view that separate extreme scores on basic personality traits or combinations of such scores in five-factor profiles will provide adequate screening possibilities for PDs. The SAPAS-SR has better screening potential than the NEO-FFI or the SAPAS-SR and the NEO-FFI together.

Key words: personality disorders; Big Five, personality; screening instrument

INTRODUCTION

Co-morbid personality disorders (PD) not only adversely affect the outcome of mental illnesses, but are also important factors in the choice of treatment options (Moran et al., 2003; Newton-Howes, Tyrer, & Johnson, 2006). For this reason, assessment of the personality status should be a part of each initial psychiatric examination. Diagnostic instruments with an adequate psychometric profile, like the Structured Clinical Interview for DSM-IV Personality Disorders (SCID-II; Spitzer, William, Gibbon, & First, 1990) and the Structured Interview for DSM-IV Personality Disorders – revised (SIDP-R; Reich, 1989), are well-known and accessible, but when it comes to daily reality, it is not always feasible to use these instruments in a clinical setting. Major reasons are that they are rather time-consuming and require trained personnel with a profound knowledge of psychopathology.

To reduce the time, inherent in full scale interviews, one might resort to one of the available short structured interviews for PD. Examples include the Standardized Assessment of Personality-Abbreviated Scale (SAPAS; Moran et al., 2003), the Iowa Personality Disorder Screen (IPDS; Langbehn et al., 1999), and the Rapid Personality Assessment Schedule (PAS-R; Van Horn , Manley, Leddy, Cicchetti, & Tyrer, 2000), which all have screening capacity for PD in terms of the DSM-IV and ICD-10. However, it should be noted that even such short interviews require a great deal of specific clinical training.

An alternative for interviews are self-report measures. Examples include the Personality Diagnostic Questionnaire – Revised (PDQ-R; Hyler, Skodol, Kellman, Oldham, & Rosnick, 1990), the Assessment of DSM-IV Personality Disorders (ADP-IV; Schotte, De Donckers, Vankerckhoven, Vertommen, & Cosyns, 1998), and the self-report version of the Standardized Assessment of Personality- Abbreviated Scale (SAPAS-SR; Germans, Van Heck, Moran, & Hodiamont, 2008).

While saving time, these self-report questionnaires require patients who are able to read and write properly and maintain an adequate level of concentration, because questionnaires often contain over 100 items. Furthermore, self-report questionnaires generally tend to overrate the prevalence of PDs and to have poor specificity (Verheul & Van Den Brink, 1999).

To overcome concentration problems some of the relatively short structured interviews, like the Self-Report Standardized Assessment of Personality-Abbreviated Scale (SAPAS-SR; Germans, Van Heck, Moran, & Hodiamont, 2008), and the self-report version of the Iowa Personality Disorder Screen (IPDS; Germans, Van Heck, Langbehn, & Hodiamont, 2010), are transformed into short self-report questionnaires. Both questionnaires correctly classify 81% of the patients. Therefore, they are, in spite of limitations, such as the inability to discriminate between different PDs, quite useful as quick screens for PDs.

All these instruments are based on the Diagnostic and Statistical Manual of Mental Disorders (DSM; American Psychiatric Association, 2000) and the International Classification of Diseases and Related Health Problems (ICD; World Health Organization, 1992).Consequently, they reflect the categorical approach. The criteria for diagnosing PD in DSM-5 and ICD-11, however, will

almost certainly change dramatically (DSM-5 work group, 2010). Besides the categorical approach, a dimensional component will be introduced. In view of the hypothesis that PDs are sharing the same dimensions as normal personality, just with extreme 'values', it follows that one might identify PD using assessment instruments for basic personality dimensions.

One of the best known models for defining personality, using a dimensional approach, is the Big Five model (e.g., Costa & Mc Crea, 1992; Goldberg, 1990). This model is a general comprehensive framework for structuring individual differences. The five dimensions, which are seen as pervasive across cultures, reflect sociability (*Extraversion*), interpersonal interaction (*Agreeableness*), self-discipline and impulse control (*Conscientiousness*, describing task- and goal-directed behavior), personal adjustment (*Neuroticism*, contrasting emotional stability with anxiety, anger, and other negative feelings), and openness to new experiences (*Openness*, reflecting the breadth, depth, and complexity of mental and experiential life).

Costa and McCrea (1992) have suggested that the five-factor model of personality is highly relevant to the conceptualization and assessment of PDs. They have proposed to let the Big-Five model replace the categorical system for identifying PD in DSM-IV, because, in their view, the broad five supertrait dimensions offer adequate information to identify PDs that are traditionally diagnosed by categorical means. Several authors support these claims (Wiggins & Pincus, 1989; Costa & Mc Crae, 1990). Widiger, Costa, and McCrae (2002) have described how PD can be understood in terms of the Big-Five dimensions. They also present a four- step process that shows how the 12 PDs of the DSM-IV could be diagnosed using the five-factor model. The first step consists of formulating patterns of Big Five extremes that correspond to particular PDs. This should be based on a thorough understanding and a systematic conceptualization of how the five factors are defined in terms of content. Good examples of this first step can be found in the NEO-PI-R , which includes additional facet scores for each domain (Costa & Mc Crea, 1992), and in the review of Digman (1990).

Costa and McCrae (1992) give an excellent overview of each domain along with their characteristic trait-descriptive terms (adjectives) and corresponding facet scores as used in the NEO-PI-R. The facet scores combined with the descriptions of the domains give a good idea not only of all what is encompassed by a certain domain, but also which PD should correlate substantially with extremely high or low scores on these domains.

To present an overview of the 12 PDs in DSM-IV and their corresponding five-factor profiles for quick and easy use in a clinical setting, a reference sheet was compiled on the basis of the information gathered by Rottman , Ahn, Sanislow, and Kim (2009) and Shedler and Westen (2004), taking into account the correlations computed by Trull (1992) between NEO-PI scores and scores on the PDQ-R, a scale with high sensitivity and moderate specificity for most axis-II disorders (Hyler, Skodol, Oldham, Kellman, & Doidge, 1992), and the MMPI-Personality Disorder scales (developed by Morey, Waugh, & Blashfield, 1985), as well as the meta-analytic study of Samuel and Widiger (2008) (See Table 1).

The *Revised NEO Personality Inventory* (NEO-PI-R; Costa & McCrea, 1992) contains-240 items and takes approximately 40 minutes to complete. The NEO-FFI (Dutch version by Hoekstra, Ormel, & De Fruyt, 2003) is grounded on the same theoretical foundations as the NEO-PI-R but has only 60 items. Because it has less items the latter scale provides more general information at the domain level, not at the level of more specific facets. Taking into account that the NEO-PI-R is conceived of as a potential framework to assess PD, the NEO-FFI might be a screener for PD.

The research hypothesis and focus of this article is that extreme scores on the NEO-FFI, alone or in combination with a categorical screening instrument like the SAPAS-SR, is a good screener in an outpatient psychiatric population.

Table 1 *Five-factor model profiles and DSM-IV personality disorders*

DSM-IV Personality disorder	N	E	O	A	C
Paranoid	H			L	
Schizotypal	H	L		L	
Schizoid		L			
Histrionic		H			
Narcissistic				L	
Borderline	H			L	L
Antisocial				L	L
Avoidant	H	L			
Dependent	H				
Obs.-Comp.					H
Passive-Agrr.	H			L	L
Depressive	H	L			

Note: H=extreme score in the direction of the given Big Five dimension, L = extreme score opposite to the direction of the given Big Five dimension. N: Neuroticism; E:Extraversion; O:Openness ; A:Agreeableness; C: Conscientiousness.

METHOD

Study sample

The subjects for the present study were all patients referred to GGZ Midden-Brabant, a Community Mental Health Centre in Tilburg, The Netherlands. From a total of 2116 patients that were referred to this institute between March 2004 and March 2005, 207 patients were recruited at random. The process of randomization contained one daily blind draw out of the full set of referrals. This was executed by the secretary of the intake desk. After drawing, inclusion and exclusion criteria were checked and in case of eligibility the invitation letter was send. In case of non-eligibility, there was no second draw that day.

The criteria for recruitment were: Dutch origin and being non-illiterate. All recruited patients gave informed consent prior to participation. From the 207 patients recruited, 12 patients had to be excluded because they did not, after the first session, complete subsequent assessments, resulting in a study sample of 195 patients. Hundred-and-twelve-individuals were female (57.4%), while 83 were male (42.6%). The mean age in the total group was 32.7 years (*SD* = 8.9). The primary reasons for psychiatric referral were: anxiety problems (*n*=62; 31.8%), affective problems (*n*=29; 14.9%), conduct disorders (*n*=33; 16.9%), partner-relational problems (*n*=23; 11.8%), somatic problems (*n*=12; 6.2%), labour or school problems (*n*=10; 5.1%), identity problems (*n*=7; 3.6%), social problems (*n*=4; 2.1%), addiction problems (*n*=1; 0.5%), and cognitive problems (*n*=2; 1.0%). No specific psychiatric problem was mentioned by the referring physician in the case of five patients (2.5%).

Measures

The NEO Five-Factor Inventory (NEO-FFI)

Because of its brevity, comprehensiveness, and ease of administration, the 60-item *NEO Five-Factor Inventory* (NEO-FFI) was employed. In contrast to its 'big brother', the NEO-PI-R, calculation of facet scores is not possible. Subsequently, the focus lies on the broad domains: Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness. Each of these five domains is represented by 12 items that must be scored on 5-point Likert scales. Consequently, scores range from 12 to 60. The NEO-FFI has good psychometric properties (Costa; & McCrae, 1992).

Since the present study compares the dimensional five-factor model of personality, used in the NEO-FFI ,with the categorical approach of identifying PD, as used in the DSM-IV, scores on the Big Five were transformed into dichotomous scores reflecting extreme scoring. As threshold levels the upper and lower bound 10% of all observed scores within the dataset were used [1 = score in de lowest (0-10%) or highest (90-100%) decile; 0 = score in the deciles in between]. This method not only yielded a categorical score for each Big Five domain, but also a total score for extremity of rating made up of the number of Big Five domains with a score in the lowest (0-10%) or highest (90-100%) decile.

The Structured Clinical Interview for DSM-IV-TR Peronality Disorders (SCID-II)

The SCID-II (First, Spitzer, Gibbon, & Wiliams, 1995; Dutch version by Weertman, Arntz, & kerhofs, 1997) is a semi-structured interview for diagnosing DSM-IV personality disorders. Translated into many different languages and used in clinical as well as research settings all over the world, it was chosen as the gold standard in the present study. The SCID-II consists of two parts. The first part contains eight open questions which address broad general behavior interpersonal relationships, and introspective ability of the patient. The second part holds 140 items divided into 12 sections, according to the PDs listed in the DSM-IV including the Depressive Personality

Disorder and the Passive-Aggressive Personality Disorder (American Psychiatric Association, 2000). The content of each question bears a strong resemblance to every criterion as it is listed as typical and/or necessary for a specific PD within the DSM-IV. Items are scored as follows: ? (*inadequate*), 1 (*absent*), 2 (*sub-threshold*), or 3 (*threshold*). Interviewers need prior formal training in using the SCID-II and a quite profound knowledge of psychopathology as a whole, since clinical judgment plays an essential role in translating the wide range of possible patient reactions to each question into one of the response choices. The SCID-II is primarily designed to make a categorical diagnosis of PD. The interrater reliability and internal consistency of the SCID-II are adequate (Maffei et al., 1997; Westen & Shelder, 1999; Westen & Shelder, 1999). The interrater reliability of the most recent Dutch version for the presence or absence of any PD is fair to good (Weertman, Arntz, Dreesen, Van Velzen, & Vertommen, 2003). Before undertaking fieldwork for the present study, the first author (S.G.) was formally trained in the use of the SCID-II.

The Self report Standardized Assessment of personality- abbreviated Scale (SAPAS-SR)

The authors translated the items of the original SAPAS (Moran et al., 2003) and created a self-report questionnaire, the SAPAS-SR (Germans, Van Heck, Moran, & Hodiamont, 2008). The SAPAS was originally developed by Moran et al. (2003) as a structured interview with eight dichotomous items. The original instrument was validated in a sample of clinical and polyclinical patients. The alpha coefficient for the total score of the SAPAS was 0.68. A cut-off score of 3 correctly classified over 80% of the patients with a sensitivity of 0.94 and a specificity of 0.85 (Moran et al., 2003). The 8-item SAPAS-SR is an instrument that measures three broader domains, approximately reflecting the clusters A, B and C as distinguished in the DSM-IV. Psychometric properties were studied, showing a test-retest coefficient of 0.89 for the total score. Factor analysis revealed that the three domains accounted for 53.8% of the total variance. When using a cut-off score of 4, the SAPAS-SR correctly classified 81% of the patients, while showing a sensitivity of 0.83 and a specificity of 0.80, which is only slightly lower than the results obtained with the original English interview version (Germans, Van Heck, Moran, & Hodiamont, 2008).,

Procedure

The NEO-FFI and the SAPAS-SR were completed during the initial clinical appointment. The SCID-II interview took place one week after the initial clinical appointment. The first author (S.G.) was blind for the NEO-FFI and SAPAS-SR results prior to the SCID-II interview session.

Statistical analyses

All statistical analyses were performed using the SPSS 17 for Windows package. First, all personality domain scores were transformed into dichotomous scores (extremity of rating versus no extremity of rating) that contrasted the top 10% and the bottom 10% scores, on the one hand, with the scores reflecting the less extreme range (11-89%), on the other hand. Then,

scores on a new variable, Extremity of Rating ($EoR_{0vs12345}$), were calculated: 0 (*no extremity of rating on any of the five basic personality domains*) versus 1 (*extremity of rating on one or more traits*). Subsequently, another dichotomous variable was created, reflecting the *positive* (1) or *negative* (0) outcome of the PD SCID-II diagnosis. Subsequently, Chi-square tests were performed.

As a next step in the analysis, a set of new dichotomous variables was calculated, contrasting (*i*) $EoR_{01vs2345}$; extremity of rating on 0 traits or 1 trait versus extremity of rating on 2 or more traits, (*ii*) $EoR_{012vs345}$; extremity of rating on 2 or less than 2 traits versus extremity of rating on 3 or more traits, and (*iii*) $EoR_{0123vs45}$; extremity of rating on 3 or less than 3 traits versus extremity of rating on 4 or 5 traits. Three Chi-square tests were employed in order to examine whether different levels of extremity of rating were linked to caseness (i.e., any PD) in terms of SCID-II diagnosis (*yes/no*). Thereafter, for each participant the number of five-factor domains with extreme scoring was calculated. No participant had extreme scores on *all* five basic personality traits. This yielded a range of 1 (*no extremity of rating*) to 4 (*extremity of rating on four traits*). Additionally, a Pearson correlation coefficient was calculated to examine a possible relationship between the number of extreme five-factor scores and the number of PDs as diagnosed by the SCID-II interview.

Finally, dichotomous variables were created to distinguish participants who did not have a particular profile as described in Table 1 (score =0) and participants who actually did (score = 1).

Again Chi-square analyses were used to test the associations between the 12 dichotomous variables [e.g., Paranoid Big-Five Profile (*yes/no*), Schizotypal Big-Five profile (*yes/no*), Schizoid Big-Five profile (*yes/no*), etc.) and the PD diagnoses, according to the SCID-II. Then, we compared the NEO-FFI with the SAPAS-SR. A dichotomous variable, using the SAPAS-SR cut-off score of 4 (Germans, Van Heck, Moran, & Hodiamont, 2008) was compared with ($EoR_{0vs12345}$). For a final analysis, a variable was examined that combined ($EoR_{0vs12345}$) with a positive screening result on the SAPAS-SR. This composite score was compared with the SCID-II diagnosis of any PD (*yes/no* PD). Hereafter, correlation analyses and regression analyses were performed to examine the associations between personality traits and PD.

RESULTS

According to the SCID-II, at least one PD was present in 97 (50%) of the 195 patients. The mean number of PDs in patients diagnosed with any PD was 1.8 ($SD = 0.87$). The overall total number of SCID-II diagnoses was 172. The highest scoring personality factors of the study sample were Neuroticism and Agreeableness and the lowest scoring was Extraversion (see Table 2).

A Chi-square test, examining the relation between Extremity of Rating on one or more basic personality traits, on the one hand, (*yes/no*) and a PD diagnosis, according to the SCID-II (*yes/no*), on the other hand, revealed no significant relationship ($\chi^2(1, N=195) = 0.072$, $p = 0.79$). Among all 195 participants, there were 70 patients (35.9 %) that showed no extreme score on

any of the five-factor domains. Seventy-eight patients (40%) showed an extreme score on one of the domains, 31 (15.9 %) on two domains, 14 (7.2 %) on three domains, and two patients (1%) on four domains. Chi-square analyses, scrutinizing the relationships between the dichotomous variables $EoR_{01vs2345,}$ $EoR_{012vs345, and}$ $EoR_{0123vs45}$ and caseness, according to SCID-II, did not result in significant associations (χ^2 (1, *N*=195) =0 *.942, p* = 0.33; χ^2 (1, *N*=195) = 0.172, *p* = 0.68; χ^2 (1, *N*=195) = 0.001, *p* = 0.97).

The correlation between the number of five-factor extremes and the number of PDs, identified with the use of SCID-II , was non-significant and very weak, *r*= -0.05, *p* =0 .47.

For all participants with a specific PD, according to the SCID-II interview, it was examined whether or not they had the specific NEO-FFI profile as specified in Table 1. For instance, it was found that none of the 44 patients with a Borderline PD scored on the NEO-FFI the specific profile for Borderline syndrome (high on Neuroticism, low on Agreeableness and Conscientiousness) (see Table 3).

Table 2 *Dimensional scores for the five NEO-FFI personality factors*

Factor	Minimum-score	Maximum score	Median	Mean	*SD*
Neuroticism	16	58	45.0	43.7	8.3
Extraversion	16	57	35.0	35.1	8.2
Openness	22	54	36.0	36.7	6.7
Agreeableness	26	58	42.0	41.3	5.9
Conscientiousness	22	53	39.5	38.8	6.3

Table 3 *Number of patients with one or more PDs, according to the SCID-II and the NEO-FFI*

Personality Disorders	SCID-II	NEO-FFI	
	N	Hit-*N*	No-Hit-*N*
Cluster A			
Paranoid	6	0	6
Schizotypal	1	1	0
Schizoid	1	1	0
Total Cluster A	8	2	6
Cluster B			
Histrionic	4	1	3
Narcissistic	5	1	4
Borderline	44	0	44
Antisocial	19	0	19
Total Cluster B	72	2	70

Table 3 *(Continued)*

Personality Disorders		SCID-II		NEO-FFI
		N	Hit-*N*	No-Hit-*N*
Cluster C				
	Avoidant	27	2	25
	Dependent	14	3	11
	Obsessive-Compulsive	21	4	17
	Total Cluster C	62	9	53
N.A.O.				
	Passive-Aggressive	9	0	9
	Depressive	10	1	9
	Total N.A.O.	19	1	18
Overall total		161	14	147

Note:*N* = number of patients. Hit = true positive; No-Hit = false negative. If a patient meets the SCID-II criteria for more than one personality disorder, then he/she is listed for all diagnosed PDs.

In addition, values for sensitivity, specificity and correctly classified cases were calculated. Table 4 gives an overview.

Table 4 *Sensitivity, specificity and the power to predict specific PDs with the NEO-FFI*

Personality disorder	Sensitivity	Specificity	Positive predictive value	Negative predictive value	Correctly classified (%)
Paranoid	0.00	0.98	0.00	0.97	0.95
Schizotypal	1.00	0.99	0.50	1.00	0.99
Schizoid	1.00	0.93	0.07	1.00	0.93
Histrionic	0.25	0.88	0.04	0.98	0.87
Narcissistic	0.20	0.92	0.06	0.98	0.90
Borderline	0,00	0,99	0.00	0.77	0.77
Antisocial	0.00	0.99	0.00	0.90	0.90
Avoidant	0.06	0.98	0.33	0.87	0.85
Dependent	0.21	0.87	0.12	0.93	0.83
Obs.-Comp.	0.19	0.90	0.20	0.90	0.83
Passiv-Aggr.	0.00	0.99	0.00	0.95	0.95
Depressive	0.10	0.97	0.17	0.95	0.93
Any PD	0.63	0.35	0.48	0.50	0.49

Twelve Chi-square tests comparing SCID-II diagnoses with the presence or absence of a particular Big-Five profile were performed. The majority of these analyses failed to find significant associations. Exceptions were the analyses for the schizotypal PD profile, $c^2(1, N=195) = 96.99$, $p < .001$, and the schizoid PD profile, $c^2(1, N=195) = 12.06$, $p = .001$.

The Chi-square test comparing the presence or absence of Extremity of Rating on at least one five-factor domain, on the one hand, with a positive or negative screening result on the SAPAS-SR, on the other hand, did not provide empirical support for a significant relationship ($\chi^2 (1, N=195) = 0.072$, $p = 0.79$

A final analysis, combining SAPAS-SR and Big-Five profile information, both resulted in a significant relation between this composed score and the gold standard: $c^2(1, N=195) = 34.52$, $p < 0.001$, revealing a sensitivity of 0.54, a specificity of 0.86, and a value of 0.70 for correctly classified cases.

The screening abilities of the NEO-FFI were disappointing when using the profiles in Table 1. Therefore, to examine the associations between the NEO-FFI domains and the DSM-IV-TR PD criteria correlation and regression analyses were performed. Correlational analyses of the NEOFFI domain scores and dimensional scores for DSM-IV-R PD show that all domains correlate with two or more PDs (see Table 5).

Table 5 *Correlation analyses for DSM-IV Personality Disorders against NEO-FFI scores*

Personality Disorder	N	E	O	A	C
Paranoid	0.17*	-0.22*	-0.04	-0.32**	-0.08
Schizotypal	0.13	-0.26**	-0.06	0.17*	-0.29**
Schizoid	0.11	-0.31**	-0.05	0.15*	-0.29**
Histrionic	-0.03	0.27**	0.16*	0.16*	0.08
Narcissistic	0.08	0.04	0.19**	-0.29**	0.07
Borderline	0.35**	-0.07	-0.01	-0.32**	-0.19**
Antisocial	0.11	0.01	0.11	-0.31**	-0.20**
Avoidant	0.28**	-0.28**	-0.04	0.10	-0.10
Dependent	0.27**	-0.08	-0.08	0.18*	0.05
Obs.-Comp.	0.03	-0.08	0.05	0.08	0.22**
Passiv-Agr.	0.28**	-0.05	0.14	0.02	0.04
Depressive	0.37**	-0.26**	0.00	0.21**	-0.08
Any PD	0.31**	-0.27**	0.03	-0.23**	-0.27**

Note: *p <0.05; **p<0.01; ***p<0.001; N: Neuroticism; E:Extraversion; O:Openness ; A:Agreeableness; C: Conscientiousness.

Agreeableness correlated negatively with six PDs, namely, Paranoid, Schizoid, Schizotypal, Antisocial, Borderline and Histrionic PD. Neuroticism showed five positive significant correlations with Paranoid, Borderline, Avoidant, Passive-Aggressive and Depressive PD. The most statistically significant simple correlation involved Agreeableness.

Table 6 and Table 7 provide the results from logistic and hierarchical regression analyses using the NEO-FFI domain scores as the predictor variables and the SCID-II diagnoses as the criterion variables. The domain scores are statistically significant predictors for each of the 12 PDs. At the domain level the NEO-FFI was effective in predicting symptom counts associated with Depressive, Borderline and Schizoid PD. The NEO-FFI was a poorer predictor of Obsessive-Compulsive PD.

Table 6 *Logistic regression predicting SCID-II Personality Disorder counts with NEO-FFI domain scores*

Personality Disorder	N	E	O	A	C	R^2
Paranoid				•		0.24
Schizotypal						
Schizoid						
Histrionic						0.31
Narcissistic			•	•		0.29
Borderline	•			•		0.19
Antisocial				•	•	0.22
Avoidant		•		•		0.22
Dependent						0.10
Obs.-Comp.		•				0.06
Passiv-Agr.	•		•			0.26
Depressive		•				0.27
Any PD	•			•		0.23

Note: • = predictive domain; N: Neuroticism; E: Extraversion; O: Openness; A: Agreeableness; C: Conscientiousness.

The correlations analyses and the regression analyses show associations between the NEO-FFI and the DSM-VI-TR PD criteria, but not very strong ones, the R^2 coefficients were for all the PDs between 0.10 and 0.21, which means that between 10 % and 21% of the variance was explained.

Table 7 *Hierarchical regression predicting SCID-II Personality Disorder Symptom counts with NEO-FFI domain scores*

Personality Disorder	N	E	O	A	C	F (5, 189)	R^2
Paranoid		•		•		6.45***	0.15
Schizotypal		•		•	•	6.83***	0.15
Schizoid	•	•			•	8.06***	0.18
Histrionic		•		•		5.49***	0.13
Narcissistic			•	•	•	6.86***	0.16
Borderline	•	•		•		9.72***	0.21
Antisocial				•	•	5.97***	0.14
Avoidant	•	•		•		5.55***	0.13
Dependent	•			•		6.13***	0.14
Obs.-Comp.		•			•	4.01**	0.10
Passiv-Agr.	•		•		•	6.66***	0.15
Depressive	•			•		11.51***	0.24

*Note:*p* <0.05; ***p*<0.01; ****p*<0.001; • =predictive domain; N: Neuroticism; E:Extraversion; O:Openness ; A:Agreeableness; C: Conscientiousness.

DISCUSSION

The hypothesis that the NEO-FFI could fulfill an important role as a dimensional screener for PD did not find support. Convergence between the categorical SCID-II results and the NEO-FFI was poor. With the SCID-II as the gold standard, the NEO-FFI does not fare well as an adequate screener. Furthermore, the NEO-FFI did not outperform a short categorical screener like the SAPAS-SR. Moreover, no support could be found for our expectation that extreme scores on the NEO-FFI should add value to the screening capabilities of the SAPAS-SR. This is not surprising, considering the disappointing results of the usefulness of the NEO-FFI as a screening instrument for PDs. The fact that no significant relationships between the SAPAS-SR and the NEO-FFI screening results could be obtained adds to the already established validity of the SAPAS-SR as a useful screening instrument (Germans, Van Heck, Moran, & Hodiamont, 2008).

The present study has a few limitations. First, it is questionable whether the five-factor domains alone, as they are measured by the NEO-FFI, have sufficient power of discernment to screen for all the 12 PDs. Even though the five-factor model may be considered comprehensive, it is conceivable that the facet scores as originally measured by the NEO-PI-R, are necessary in order to provide important additional information. Careful examination of the different facets of each of the five factors, reveals that certain incongruenties become apparent that may be clinically important. For example, it seems necessary to differentiate between two highly extraverted individuals, where one scores highly on the facet of assertiveness and the other on

positive emotions. Also angry hostility and impulsivity seem out of place in some PDs that would clearly include a high score of neuroticism in a five-factor profile, because these two facets seem different from the facets of vulnerability and anxiousness, which are also part of the neuroticism domain. Widiger and Mullins (2003) indicate that, for instance, in case of the Borderline PD, with the exception of self-consciousness that all other facets of neurotisme (anxiousness, angry hostility, depressives, impulsivity, and vulnerability) are relevant while, self-consciousness plays a major rol in the Schizotypical PD

Second, most of the literature reviewed did not include the Passive-Aggressive as well as the Depressive PD. This made it difficult to find an empirical base for defining these two PDs in terms of the five-factor model.

Thirth, the Schizoid PD deserves mentioning since it was a tough one to translate into a five-factor profile. According to the meta-analytic review mentioned above, only extremely low scores on Extraversion define the profile. Not surprisingly, the results indicate, that the Schizoid PD is greatly over-screened when using that profile. Furthermore, it became obvious, that the number of extreme score requirements in a five-factor profile greatly reduces the frequency with which that profile's PD is screened. Borderline PD is the perfect example here. It had the highest frequency, according to SCID-II diagnoses. In spite of this, none of the patients was correctly classified as Borderline PD, according to the five-factor profile.

Overall we concluded that the screening capacity of the NEO-FFI for personality disorders is poor using Big-Five profiles . This does not mean that there was no association between the NEO-FFI en the DSM-PDs, therefor futur research has to focus on the instrument with more detailed information such as the NEO-PI-R.

Acknowledgements and Disclosure of Interest: None

REFERENCES

Aboaja, A., Duggan, C., & Park, B. (2011). An exploratory analysis of the NEO-FFI and DSM personality disorders using multivariate canonical correlation. *Personality and Mental Health*, *5*, 1-11

American Psychiatric Association (2000). *Diagnostic and statistical manual of mental disorders: DSM-IV-TR*. Washington, DC: Author.

Bagby, R.M., Costa, P.T., Widiger T.A., Ryder, A.G.,& Marshall, M. (2005). DSM-IV personality Disorders and the Five-Factor Model of Personality: A multi-method examination of domain and facet-level predictions. *European Journal of Personality*, *19,* 307-324.

Clark, L., Livesley, W., & Morey, L. (1997). Personality disorder assessment: The challenge of construct validity. *Journal of Personality Disorders, 11*, 205-231.

Costa, P.J., & McCrae, R. (1990). Personality disorders and the five-factor model of personality. *Journal of Personality Disorders, 4,* 362-371.

Costa, P.J., & McCrae, R.(1992). *Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory(NEO-FFI) Professional Manual*. Odessa, FL: Psychological Assessment Resources.

Costa, P.J., & McCrae, R. (1992). The Five-Factor Model of Personality and its relevance to personality disorders. *Journal of Personality Disorders, 4*, 343-359.

DeCuyper, M., De Pauw, S., De Fruyt, F., De Bolle M., & De Clercq, B.J. (2009). A meta-anaysis of psychopathy-, Antisocial PD- and FFM associations. *European Journal of Personality*, *23*, 531-565.

Digman, J. (1990). Personality structure: Emergence of the Five-Factor Model. *Annual Review of Psychology, 41*,417-440.

DSM-5 work group (2010, September, second). Re: Personality and personality disorders. Retrieved from http://www.dsm5.org/Pages/Default.aspx

Farmer, R., & Chapman, A. (2002). Evaluation of DSM-IV Personality Disorder criteria as assessed by the Structured Clinical Interview for DSM-IV personality disorders. *Comprehensive Psychiatry*, *43*, 285-300.

First, M., Spitzer, R., Gibbon, M., & Williams, J. (1995). The structured clinical interview for DSM-III-R personality disorders (SCID-II): part I: Description. *Journal of Personality Disorders, 9*, 92-104.

Germans, S., Van Heck, G.L., Langbehn, D.R., & Hodiamont, P.P.G. (2010). The Iowa Personality Disorder Screen (IPDS): Preliminary results of the validation of a self-administered version in a Dutch population. *European Journal of Psychological Assessment, 26*, 11-18.

Germans, S., Van Heck, G.L., Moran, P., & Hodiamont, P.P.G. (2008). The self-report Standardized Assessment of Personality- abbreviated Scale; Preliminary results of a brief screening test for personality disorders. *Personality and Mental Health, 2*, 70-76.

Goldberg, L.R. (1990). An alternative "description of personality": The Big-Five factor structure. *Journal of Personality and Social Psychology*, *59*, 1216-1229.

Hoekstra, H.A., Ormel, J., & De Fruyt, F. (2003). *NEO-FFI Big Five persoonlijkheidsvragenlijst [NEO-FFI Big Five personality questionnaire]* . Lisse. The Nederlands : Swets & Zeitlinger B.V.

Hyler, S.E., Skodol, A.E., Kellman, H., Oldham, J.M., & Rosnick, L. (1990). Validity of the Personality Diagnostic Questionaire - Revised: Comparison with two structured interviews. *American Journal of Psychiatry*, *147*, 1043-1048.

Hyler, S., Skodol, A., Oldham, J.M., Kellman, H.D., & Doidge, N. (1992). Validity of the Personality Diagnostic Questionnaire-Revised: A replication in an outpatient sample. *Comprehensive Psychiatry*, 33, 73-77.

Langbehn, D.R., Pfohl, B.M., Reynolds, S., Clark, L.A., Battaglia, M., Bellodi, L., Cadoret, R., Grove,W., Pilkonis, P., & Links, P. (1999). The Iowa Personality Disorder Screen: Development and preliminary validation of a brief screening interview. *Journal of Personality Disorders, 13,* 75-89.

Maffei, C., Fossati, A., Agostoni, I., Barraco, A., Bagnato, M., Deborah, D., et al. (1997). Interrater reliability and internal consistency of the structured clinical interview for DSM IV axis II personality disorder (SCID II) version 2.0. *Journal of Personality Disorders, 11* , 85-92.

Moran, P., Leese, M., Lee, T., Walter, P., Thornicroft, G., & Mann, A. (2003). Standardised Assessment of Personality- Abbreviated Scale (SAPAS): Preliminary validation of a brief screen for personality disorder. *British Journal of Psychiatry, 183*, 228-232.

Moran, P., Walsh, E., Tyrer, P., Burns, T., Creed, F., & Fahy, T. (2003). The impact of co-morbid personality disorder on violence in psychosis – data from the UK700 trial. *British Journal of Psychiatry ,182*, 129-134.

Morey, L.C., Waugh, M.H., & Blashfield, R.K. (1985). MMPI scales for DSM-III personality disorders: Their derivation and correlates. *Journal of Personality Assessment, 49,* 245-251.

Newton-Howes, G., Tyrer, P., & Johnson, T. (2006). Personality disorder and the outcome of depression: Meta-analysis of published studies. *British Journal of Psychiatry, 188*, 13-20.

Reich, J. (1989). Update on instruments to measure DSM-III and DSM-III-R personality disorders. *Journal of Nervous and Mental Disease, 177*, 366-370.

Rottman, B., Ahn, W., Sanislow, C., & Kim, N.(2009). Can clinicians recognize DSM-IV personality disorders from five-factor model descriptions of patient cases? *American Journal of Psychiatry ,166,*427-433.

Samuel, D., & Widiger, T. (2008). A meta-analytic review of the relationships between the five-factor model and DSM-IV-TR personality disorders: A facet level analysis. *Clinical Psychological Review, 28*,1326-1342.

Schotte, C., De Doncker, D., Vankerckhoven, C., Vertommen, H., & Cosyns, P.(1998). Self-report assessment of the DSM-IV personality disorders. Measurement of trait and distress characteristics: The ADP-IV. *Psychological Medicine,28*, 1179-1188.

Shedler, J., & Westen, D.(2004). Refining personality disorder diagnosis: Integrating science and practice. *American Journal of Psychiatry*, *161*, 1350-1365.

Spitzer, R., Williams, J., Gibbon, M., & First, M. (1990).*Structured Clinical Interview for the DSM-III-R Personality Disorders (SCID-II)*. Washington DC: American Psychiatric Press, 1990.

Trull, T.(1992). DSM–III–R Personality disorders and the Five-Factor Model of personality: An empirical comparison. *Journal of Abnormal Psychology, 101*, 553-560.

Van Horn, E., Manley, C., Leddy, D., Cicchetti, D., & Tyrer, P.(2000). Problems in developing an instrument for the Rapid Assessment of Personality Status. *European Psychiatry, 15,*29-33.

Verheul, R., & Van den Brink, W. (1999). Persoonlijkheidsstoornissen [Personality disorders]. In A. De Jong, W. Van den Brink, J. Ormel, and D. Wiersma (Eds.), *Handboek psychiatrische epidemiologie [Handbook of psychiatric epidemiology]* (pp. 355-359) Maarsen, The Netherlands: Elsevier/De Tijdstroom.

Weertman, A., Arntz, A., Dreessen, L., Van Velzen, C., & Vertommen, S. (2003). Short-interval test-retest interrater reliability of the Dutch version of the Structured Clinical Interview for DSM-IV personality disorders (SCID-II). *Journal of Personality Disorders, 17,* 562-567.

Weertman, A., Arntz, A., & Kerkhofs, M. (1997). *Gestructureerd Klinisch Interview voor de DSM-III Persoonlijkheidsstoornissen [Structured CLinical Interview for the DSM-III personality disorders]*. Lisse, The Nederlands: Swets Test Publisher.

Westen, D., & Shelder, J.(1999). Revising and assessing Axis II, Part I: Development of a clinically and empirically valid assessment method. *American Journal of Psychiatry, 156*, 258-272.

Westen, D., & Shelder, J.(1999). Revising and assessing Axis II, Part II: Toward an empirically based and clinically useful classification of personality disorders. *American Journal of Psychiatry, 156*, 273-285.

Widiger, T., Costa, P., & McCrae, R. (2002). A proposal for Axis II: Diagnosing personality disorders using the five-factor model. In *Personality disorders and the five-factor model of personality (2nd ed.)* (pp. 431-456). Washington, DC: American Psychological Association.

Widiger, T.A., & Mullins, S. (2003) Personality disorder. In A. Tasman J. Kay, & J.A.Lieberman (Eds.), *Psychiatry*, 2nd Edition (pp. 1603-1637). Chichester, England: John Wiley & Sons.

Wiggins, J., & Pincus, A. (1989). Conceptions of personality disorders and dimensions of personality. *Psychological Assessment: Journal of Consulting and Clinical Psychology, 1*, 305-316.

World Health Organization:-(1992). *International Classification of Diseases*, Tenth Revision, Geneva,Switzerland: World Health Organization.

PART D

Heteroanamnestische screeningsintstruments

CHAPTER 8

Validation of two informant-based screening instruments for personality disorders in a psychiatric outpatient population

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ABSTRACT

Purpose: The predictive validity of two informant-based screening instruments for personality disorders (PDs), the Standardized Assessment of Personality (SAP) and a short 8-item version (SAPAS-INF), were studied in 103 Dutch psychiatric outpatients, using the SCID-II as the gold standard.

Method: All patients and their informants were interviewed separately and independently by different interviewers who were blind for the results in the other condition.

Results: According to the SCID-II, 66 patients had at least one personality disorder (PD). The SAP correctly classified 72 percent of all participants in the category PD Present/Absent. The sensitivity and specificity were 69% and 76%, respectively. The positive and negative predictive values were 84% and 58%. The SAPAS-INF, using a cut-off score of 3, correctly classified 70 percent, the sensitivity and specificity were 76 % and 58 %, respectively. The positive and the negative predictive values were 77 % and 57%.

Conclusion: These results show that the informant-based SAP as well as the shorter informant-based SAPAS-INF are adequate, though rather moderate, screening instruments for identifying PD. The SAP and the SAPAS-INF, however, both perform worse than the SAPAS-SR, which is based on patient's self-report. Therefore, it is concluded that the SAP or the SAPAS-INF can be used as satisfactory screening instruments for the presence/absence of PD in those cases where patients themselves are unable to provide the required information.

Key words: personality disorders, screening, informant-based instruments

INTRODUCTION

Since co-morbid personality disorders (PDs) can adversely affect the management of mental illnesses (Moran et al., 2003; Newton-Howes, Tyrer & Johnson, 2006), assessment of the personality status of patients should be an essential part of every psychiatric examination. Although not perfect (Zimmerman, 1994), standardized clinical interviews are generally considered to be the most reliable and valid methods for the assessment of PDs. However, quite often performing such an interview is very time consuming. Moreover, it can be exhausting for the patient. Also self-report questionnaires can be useful research tools, particularly when employed as part of a two-stage design for case identification (Lenzenweger et al., 1997). However, self-report questionnaires generally have poor specificity and can also be tiring for patients as they require the ability to concentrate on written questions. A third approach is to conduct a brief structured interview that is incorporated into a standard psychiatric interview. Several short structured interviews have been developed. The internationally most frequently used instruments are the Rapid Personality Assessment Schedule (PAS-R; Van Horn et al., 2000), the Iowa Personality Disorder Screen (IPDS; Langbehn et al.,1999), and the Standardised Assessment of Personality - Abbreviated Scale (SAPAS; Moran et al., 2003).

All the instruments mentioned above employ the same source of information, namely the patient. Consequently, this can be responsible for obtaining rather limited information about patient functioning. The quality of the data collected is very much dependent on the capability and willingness of the patient to provide a factual picture and truthful report. Part of the problem is that sometimes patients, due to an abnormal mental state, cannot give a faithful account. The symptoms of a PD reflect how persons act in different situations and how they interact with their continuously changing environment (Zimmerman, 1994). This raises the question whether patients with a PD are able to have an understanding and sound grasp of their own social and interpersonal functioning. A solution could be a screening instrument with one or more informants as the source of information.

The Standardised Assessment of Personality (SAP; Mann et al., 1981; Walters et al., 2004; Pilgrim et al., 1990) is an informant-based interview that is extensively examined with respect to its psychometric qualities. It has good inter-rater and inter-informant reliability (Pilgrim et al., 1993). It is possible to conduct the interview face-to-face, but it can also be performed by telephone.

The major aims of this study were to examine the usefulness of the full-length SAP as well as a much shorter SAP-based instrument, the SAPAS-INF, as screening instruments for the SCID-II interview, which was used as the gold standard for diagnosing PD (see also Germans et al., 2008). Furthermore, our goal was to examine the level of agreement between the two informant-based instruments (SAP and SAPAS-INF). Finally, the study's aim was to examine which informant gives the most valid information and, therefore, can be used best.

METHOD

Site and participants

This study was performed at GGZ Midden-Brabant, a Community Mental Health Centre (CMHC) in Tilburg, the Netherlands. The study was approved by the Regional Medical Ethical Committee. From all patients (n =4232) referred to this CMHC between January 2008 and October 2009, 172 patients were randomly recruited in the phase of an initial evaluation and were not currently in treatment. Only non-illiterate patients of Dutch origin were included. Forty-four patients (25.3% of the total, 20 men and 24 women; mean age= 31.1 years) refused to participate. The rest of the group did give informed consent. Twenty-seven patients (15.5 % of the total, 7 men and 20 women; mean age = 36.0 years) had to be excluded because they did not return after the first assessment. As a result, the final study group consisted of 102 patients (41 men (40.2%) and 61 women (59.8%); mean age = 33.7 years (SD = 9.9)). Some participants reported a history of psychiatric hospitalisation (n =8; 7.8 %) or outpatient treatment (n=48; 46.6 %).

Instruments

SCID-II

The SCID-II interview (First et al, 1995), Dutch version by Weertman, Arntz, and Kerkhofs (1997), covers the complete set of PDs listed in the DSM-IV-TR (APA,1994) as well as the passive-aggressive and depressive PDs, listed in the appendix of the DSM-IV-TR. The SCID-II interview contains two parts: eight open questions on the patient's general behavior, interpersonal relationships, and self-reflective abilities, followed by 140 items scored as 1 (*absent*), 2 (*sub-threshold*), or 3 (*threshold*). The instrument is primarily designed to yield categorical diagnoses of PDs. The inter-rater reliability and internal consistency are adequate (Maffei et al., 1997, Westen & Shelder, 1999). The psychometric properties of the Dutch version are fair to good (Weertman, 2003). The inter-rater reliability (Cohen's Kappa) ranged from 0.77 for the obsessive-compulsive PD to 0.82 for the avoidant PD. The overall Kappa was 0.80 (Arntz et al., 1992). These figures are comparable with the associations obtained in the study of Masthoff and Trompenaars (2006), who found for two well-trained and certified raters an overall Kappa of 0.87 in a large sample of psychiatric outpatients. Because the second phase was performed by only one well-trained and certified interviewer, this type of reliability could not be calculated in the present study. Before undertaking the fieldwork for this study, the researchers (S.G., J.K., D.E., H.K.), all psychiatrists, were formally trained in the use of the SCID-II.

The Standardized Assessment of Personality (SAP)

The Standardized Assessment of Personality (SAP; Mann et al., 1981), is a brief semi-structured interview with an informant that can be conducted face-to-face or by telephone. The informant should have known the patient for at least five years. Research using the SAP has indicated that female informants with a relatively long acquaintance of the patient provide data that shows

the highest level of inter-rater and inter-temporal reliability (Pilgrim et al., 1993). An opening sequence of 13 questions of the informant may suggest particular keywords. These keywords in turn lead to different categories of PD. This will happen by asking questions in order to find out whether there are enough criteria met and whether there is enough evidence that these criteria point at the presence of a distress or handicap. If no key words appear in the 13-item introduction phase, then the interview is terminated and no PD is assumed.

The interview takes about 10-20 minutes. The average overall inter-rater reliability (Cohen's Kappa) for the SAP is 0.76, with a range from 0.60 to 0.82 (Pilgrim et al., 1993). The inter-informant reliability varies from 0.96 to 0.93 (McKeon, Roa & Mann, 1984). The positive and negative predictive values of the SAP, with the International Personality Disorder Examination (IPDE; Loranger et al., 1994), as the 'gold standard', were 47% and 97%, respectively (Mann et al., 1999). It was concluded that the SAP is a potentially adequate screening instrument in a two-phase approach in epidemiological assessment of PD.

Since no Dutch version of this instrument was available at the time of this study, the original version of the SAP was translated into the Dutch language by the authors and translated back into English by the translation centre of Tilburg University.

SAPAS-INF

The authors translated the items of the original SAPAS (Moran et al., 2003), a structured interview and created a self-report questionnaire, the SAPAS-SR (Germans, Van Heck, Moran & Hodiamont, 2008). The original SAPAS consists of eight dichotomously rated items, which the original authors had taken from the opening section of the informant-based semi-structured interview, the Standardised Assessment of Personality (SAP; Mann et al., 1981; Mann et al., 1999). Scores on the SAPAS range from 0 to 8. The alpha coefficient for the total score of the SAPAS is 0.68. Employing a cut-off score of 3 on the SAPAS correctly classified over 80% of the patients with a sensitivity of 0.94 and a specificity of 0.85 (Moran et al., 2003). The SAPAS-SR is also an instrument with eight items that measure three broader domains, reflecting cluster A, B and C PDs. Psychometric properties were studied, showing a test-retest coefficient of 0.89 for the total score. As demonstrated by factor analysis, these three domains account for 53.8% of the total variance. When using a cut-off score of 4, the SAPAS-SR correctly classified 81% of the subjects, while showing a sensitivity of 0.83 and a specificity of 0.80. This is slightly lower than found with respect to the original English version (Germans, Van Heck, Moran & Hodiamont, 2008). The authors transformed the Dutch SAPAS-SR into a structured interview for informants (SAPAS-INF).

Procedure

The SAP and the SAPAS-INF were conducted as face-to face interviews with an informant in a routine standardised diagnostic process. Patients received extensive written information regarding the study and were asked, in the letter as well as personally, to bring along an

informant to the next session. One of the researchers conducted the SCID-II interview and was able to use all the information that was in the patient's file. One of the other researchers conducted first the semi-structured SAP interview and thereafter the fully structured SAPAS-INF interview. This particular order was chosen because that would exclude the possibility that SAPAS-INF information could be used in the initial phase of the SAP interview. He/she was blind for earlier obtained information concerning the patient.

Analysis

All statistical analyses were performed with SPSS version 12 (SPSS Inc., Chicago, IL). Analyses were conducted regarding the absence and presence of PD and the identification of different PD categories. Weighted Kappa (Cohen, 1960) was used to assess the agreement of the classification systems. Kappa's below 0.40 reflect low agreement, between 0.40 and 0.59 they are classified as moderate, between 0.60 and 0.79 as good, and higher than 0.80 as excellent (Landis & Koch, 1977).

RESULTS

Sixty-six of the 103 patients received a SCID-II diagnosis, yielding a prevalence of PDs of 64.1%. The mean number of PD diagnoses among those with any PD was 2.2 (SD=1.2). The SAP identified 55 patients with PDs (54%) in the sample. Table 1 gives an overview over the categories of informants.

Table 1 *Information about the informants and correlation with the SCID-II and the SAP for any PD*

Informants	N (%)	Correctly classified %
Men	41 (40.2)	73.2
Women	61 (59.8)	70.5
Partner	56 (54.9)	73.2
Direct family	36 (35.3)	75.0
Friend	10 (9.8)	50.0
Duration of the relationship		
<5 year	23 (22.3)	78.3
5-15 years	23 (22.3)	70.0
>15 years	56 (55.4)	70.0

There was no significant difference between the performance of male and female informants. There was no significant difference between partner and family members. Friends were less able to classify the patient properly, but there were only 10 friends in the sample and in all the 10

cases had the patient a PD. The mean duration of the relationship with the informants was 17.5 years (SD=13.0). The duration of the relationship with the patient was categorized as follows: categorist in less than five years, between five years and 15 years, and more than 15 years. There were no significant differences between these categories with respect to correctly classifying the caseness of PD.

Table 2 shows for the SAP the sensitivity, specificity, power to predict, and the percentage of correct classifications (any PD).

Table 2 *Sensitivity, Specificity and The Power to Predict personality disorder of the Standardised Assessment of Personality (SAP)*

	Sensitivity	Specificity	PPV	NPV	Correctly Classified
Cluster A					
Paranoid	0.27	0.91	0.33	0.88	0.81
Schizoid	-	-	-	-	1.0
Schizotypal	-	-	-	-	1.0
Cluster B					
Borderline	0.76	0.92	0.76	0.92	0.88
Histrionic	0	0.96	0	0.97	0.93
Narcissistic	0	0.98	0	0.95	0.93
Antisocial	0.50	0.93	0.36	0.96	0.89
Cluster C					
Avoidant	0.43	0.83	0.52	0.78	0.72
Dependent	0.33	0.96	0.33	0.96	0.92
Obsessive-Compulsive	0.35	0.93	0.54	0.85	0.84
Personality Disorder NOS*	0.72	0.52	0.33	0.85	0.57
Any personality diagnosis More than one PD	0.69	0.76	0.84	0.58	0.72

The sensitivity and the specificity for any PD are 0.69 and 0.76, respectively. The Positive Predictive Value (PPV) and the Negative Predictive Value (NPV) were for any PD 0.84 and 0.58. The SAP correctly classified 72 % of the patients for caseness. The SAPAS-INF which takes less time, has a sensitivity of 0.76, a specificity of 0.58, a PPV and a NPV of 0.77 and 0.57, respectively. The SAPAS-INF correctly classified 70% of the patients for having any PD.

Table 3 shows the level of agreement (Kappa) and the hit and no-hit cases between the SAP and the SCID-II for the various PD categories.

Table 3 *Number of patients identified by the SAP and the SCID-II with each DSM-IV TR category of PD and level of agreement*

	SCID-II (%)	SAP		Kappa
		Hit	No hit	
Cluster A				
Paranoid	15 (14.7)	4	0	0.19
Schizoid	0 (0)	0	0	-
Schizotypal	0 (0)	0	0	-
Cluster B				
Borderline	25 (24.3)	19	6	0.68
Histrionic	3 (2.9)	0	3	0.04
Narcissistic	5 (4.9)	0	5	0.03
Antisocial	8 (7.8)	4	4	0.36
Cluster C				
Avoidant	30 (29.1)	13	17	0.28
Dependent	6 (5.9)	2	4	0.29
Obsessive-Compulsive	20 (19.4)	7	13	0.32
Personality Disorder NOS*	25 (24.5)	18	7	
Any personality diagnosis	66 (64.7)	46	20	0.43

The Kappa was between 0.03 for the narcissistic PD and 0.68 for the borderline PD. The overall Kappa was moderate: 0.43.

Table 4 shows the screening potential of the SAP and the SAPAS-INF with a cut-off point of 3 (SAPAS-INF3), with the original English cut-off score of the SAPAS and with a cut-off score 4 that is used for the Dutch SAPAS-SR (Germans et al., 2008).

Table 4 *Sensitivity, specificity, and the power to predict personality disorder for the different screening instruments*

Instrument	Sensitivity	Specificity	Positive predictive value	Negative predictive value	Correctly Classified (%)
SAP	0.69	0.76	0.84	0.58	0.72
SAPAS-SR [a]	0.83	0.80	0.80	0.82	0.81
SAPAS-INF3 [b]	0.76	0.58	0.77	0.57	0.70
SAPAS-INF4 [c]	0.52	0.78	0.81	0.47	0.60

Note: [a] SAPAS-SR=Self-report Standardized Assessment of Personality- abbreviated Scale. Germans et al., 2009; [b] SAPAS-INF3=Standardized Assessment of Personality- abbreviated Scale with the original cut-off of 3 [c]; SAPAS-INF4=Standardized Assessment of Personality- abbreviated Scale with the Dutch SAPAS-SR cut-off of 3.

DISCUSSION

The major aims of this study were to examine the usefulness of the full-length SAP as well as a much shorter SAP-based instrument, the 8-item SAPAS-INF, as screening instruments for the SCID-II interview. Furthermore, our goal was to examine the level of agreement between the two informant-based instruments (SAP and SAPAS-INF). Finally, the study's aim was to examine which informant gives the most valid information and, therefore, can be used best.

The results show that the informant-based SAP as well as the shorter informant-based SAPAS-INF are adequate, though rather moderate, screening instruments for identifying PD. However, the SAP and the SAPAS-INF both perform worse than the SAPAS-SR, which is based on patient's self-report. Therefore, it is concluded that the SAP or the SAPAS-INF can be used as satisfactory screening instruments for the presence/absence of PD in those cases where patients themselves are not able to provide the required information.

The findings of the present study should be interpreted in the light of a number of limitations. First, the study has taken place among psychiatric outpatients in a restricted area, a large city in the southern part of the Netherlands. So, there are potential differences between the target population, psychiatric outpatients in the Netherlands, and the accessed study sample. Another aspect that reduces the generalizability is the fact that persons with a Schizoid and/or a Schizotypical PD were not present in the study sample. This seems, however, a minor problem, because these two PDs form only a small proportion of the population of individuals with one or more PDs (see also other studies, e.g.: Bernstein, Useda & Siever, 1995; Germans, Van Heck, Moran & Hodiamont 2008; Masthoff & Trompenaars, 2006).

The moderate performance of the SAP and the SAPAS-INF and, therefore, the rather modest correspondence between the SAP and the SCID-II results can be explained from different perspectives. According to Clifton et al. (2009), the discrepancy is due to the fact that patient' self-reports can reflect information that is based on their external behaviour as well as their own feelings and cognitions, while informants can only base the information they provide on external behaviours. Ready et al. (2000) explained the discrepancy with the term 'self-based heuristic': the degree to which an individual's own personality enters into or contributes to a rating of another personality.

The present study examined for each patient one informant, selected by the participant. Klonsky et al. (2002), using the term "letter of recommendation problem", have pointed at the possibility that close friends, spouses, or relatives who are chosen as informants may tend to describe participants in a positive light. Clifton et al. (2009) point at the fact that information from only a single informant limits the reliability of the data. Furthermore, they suggest that unselected peers who interact with the individual on a regular basis are likely to be more representative of a diversity of judgments. The use of more informants who are representative of the complete social network of patients would be a future research direction that is worthwhile. However, it should be kept in mind that this striving towards a more complete picture of pathological

personality is at odds with practical requirements of shortness, fastness, and low costs.

Klonsky et al. (2002) concluded that informants have less information because they often observe the patient in a particular context, while the patient can act differently in different contexts. They plead that informants have to know the patients over time and must be close to the patient. Zimmerman (1994), Downson (1992) and Dreese et al. (1998) have discussed the ability that patients or informants are able to shift between trait and state and they disagree on which person can give the most objective information about the patient's personality.
Finally, Mc Keeman and Erikson (1997) describe the possibility that informants have other motives than giving objective information. According to these researchers, informants can overrate symptoms because they want that the patient will get treatment. On the other hand, they can underrate symptoms if they do not want to put him or her in a bad light or will deny that his or her behaviour cause trouble.

CONCLUSION

Our findings support the idea that patients themselves can give the best information regarding their own personality status. In case of reading and writing difficulties as well as difficulties in contacting the patient, the SAP can be a satisfactory alternative. We did not find a significant difference between male and female informants. Nor did we find that informants that knew the patient over a longer time were better able to give the right information.

By definition, the informant interview is not suited for making clinical diagnoses of PD, but it might be used effectively as a screener if the patient is not able to provide information or the focus is on finding individuals with a borderline PD.

REFERENCES

American Psychiatric Association (1994). Diagnostic and Statistical Manual of Mental Disorders (fourth edition) (DSM-IV). Washington, DC: APA.

Arntz, A., Van Beijsterveld, B., Hoekstra, B., Hofman, A., Eussen, M., Sallaerts, S. (1992). The interrater reliability of a Dutch version of the Structured Clinical Interview for DSM-III Personality Disorders. *Acta Psychiatrica Scandinavica*, *85*, 394-400.

Bernstein, D.P., Useda, D., Siever, L.J. (1995). Paranoid personality disorder. In W.J. Livesly (Ed.), The DSM-IV personality disorders. London: The Guilford Press.

Clifton, A., Turkheimer, E., & Oltmanns, T.F. (2004). Contrasting perspectives on personality problems: description from the self and others. *Personality and Individual Differences*, *36*, 1499-1514.

Clifton, A., Turkheimer, E., & Oltmanns, T.F. (2009). Personality disorder in social networks: Network position as a marker of interpersonal dysfunction. *Social Networks*, *31*, 26-32.

Cohen, J. (1960). A coefficient of agreement for nominal scales. *Educational and Psychological Meaurement, 1*, 37–46.

Dowson, J.H. (1992). Assessment of DSM-III-R personality disorders by self-report questionnaire: the role of informants and a screening Test for Co-morbid Personality Disorders (STCPD). *British Journal of Psychiatry, 161*,344-352.

Dreessen, L., Hildebrand, M., & Arntz, A.(1998). Patient-informant concordance on the Structured Clinical Interview for DSM-III-R personality disorders (SCID-II). *Journal of Personality Disorders, 12*,149-161.

First, M.B., Spitzer, R.L., Gibbon, M., & Williams, J.B.W. (1995).The structured clinical interview for DSM-III-R personality disorders (SCID-II): part I: Description. *Journal of Personality Disorders, 9*,92-104.

Germans, S., Van Heck, G.L., Moran, P., & Hodiamont, P.P.G. (2008). The self-report Standardized Assessment of Personality- Abbreviated Scale. *Personality and Mental Health, 2*,70-76.

Klonsky, E.D., Oltmanns, T.F., & Turkheimer, E. (2002). Informant report of personality disorder: relation to self-report, and future research directions. *Clinical Psychology: Science and Practice, 9*, 300-11.

Landis, J.R., & Koch, G.G. (1977). The measurement of observer agreement for categoral data. *Biometrics*, *33*,159-174.

Langbehn, D.R., Pfohl, B.M., Reynolds, S., Clark, L.A., Battaglia, M., Bellodi, L., et al. (1999). The Iowa Personality Disorder Screen: development and preliminary validation of a brief screening interview. *Journal of Personality Disorders*, *13*,75-89.

Lenzenweger, M.F., Loranger, A.W., Korfine, L., & Neff, C. (1997). Detecting personality disorders in a nonclinical population. Application of a 2-stage procedure for case identification. *Archives of General Psychiatry*, *54*, 345-51.

Loranger, A.W., Sartorius, N., Andreoli, A., Berger, P., Buchheim, P., Channabasavanna, S.M., et al. (1994). The international Personality Disorder Examination. *Archives of General Psychiatry, 51*,215-224.

Maffei, C., Fossati, A., Agostoni, I., Barraco, A., Bagnato, M., Deborah, D., et al. (1997). Interrater reliability and internal consistency of the structured clinical interview for DSM IV axis II personality disorder (SCID II) version 2.0. *Journal of Personality Disorders, 11*,85-92.

Mann, A.H., Jenkins, R., Cutting, J.C., & Cowen, P.J. (1981). The development and use of a Standardized Assessment of abnormal Personality. *Psychological Medicine, 11*, 839-847.

Mann, A.H., Raven, P., Pilgrim, J., Khanna, S., Velayudham, A., Suresh, K.P., et al. (1999). An assessment of the Standardised Assessment of Personality as a screening instrument for the international personality examination: A comparison of informant and patient assessment for personality. *Psychological Medicine, 29*,985-89.

Masthoff, E.D.M., & Trompenaars, A.J.W.M. (2006). *Quality of life in psychiatric outpatients.* Doctoral Dissertation. Tilburg, the Netherlands: Tilburg University.

Mckeeman, J.L., & Erickson, M.T. (1997). Self and informants rating of the SCID-II personality disorder items for non-referred college women: effects on item and participants characteristics. *Journal of Clinical Psychology, 53*, 523-33.

McKeon, J., Roa, B., & Mann, A. (1984). Life events and personality traits in obsessive compulsive neurosis. *British Journal of Psychiatry*, *144*, 185-189.

Moran, P., Leese, M., Lee, T., Walter, P., Thornicroft, G., & Mann, A. (2003). Standardised Assessment of Personality- Abbreviated Scale (SAPAS): Preliminary validation of a brief screen for personality disorder. *British Journal of Psychiatry, 183*, 228-232.

Moran, P., Walsh, E., Tyrer, P., Burns, T., Creed, F., & Fahy, T. (2003). The impact of co-morbid personality disorder on violence in psychosis – data from the UK700 trial. *British Journal of Psychiatry, 182*,129-134.

Newton-Howes, G., Tyrer, P., & Johnson, T. (2006). Personality disorder and the outcome of depression: Meta-analysis of published studies. *British Journal of Psychiatry, 188*, 13-20.

Pilgrim, J.A., & Mann, A.H.(1990). Use of the Standardized Assessment of Personality to determine the prevalence of personality disorder in psychiatric in-patients. *Psychological Medicine, 20*,985-992.

Pilgrim, J.A., Mellers, J.D., Boothby, H., & Mann, A.H. (1993). Inter-rater and temporal reliability of the Standardized Assessment of Personality and the influence of informant characteristics. *Psychological Medicine, 23*,779-786.

Ready, R.E., Clark, L.A., Watson, D., & Westerhouse, K. (2000). Self-and peer- reported personality: Agreement, trait ratability and the 'self-based heuristic'. *Journal of Research in Personality, 34*,208-224.

Van Horn, E., Manley, C., Leddy, D., Cicchetti, D., & Tyrer, P. (2000). Problems in developing an instrument for the rapid assessment of personality status. *European Psychiatry, 15* (suppl. 1),29-33.

Walters, P., Moran, P., Choudhury, P., Tennyson, L., & Mann A. (2004). Screening for personality disorder: a comparison of personality disorder assessment by patients and informants. *International Journal of Methods in Psychiatric Research, 13*,34-9.

Weertman, A., Arntz, A., Dreessen, L., Van Velzen, C., & Vertommen, S.(2003). Short- interval test-retest interrater reliability of the Dutch version of the Structured Clinical Interview for DSM-IV personality disorders (SCID-II). *Journal of Personality Disorders*, 17, 562-7.

Weertman, A., Arntz, A., & Kerkhofs, M.L.M. (1997). Gestructureerd Klinisch Interview

voor de DSM-III Persoonlijkheidsstoornissen [Structured Clinical Interview for the DSM-III personality disorders]. Lisse, The Netherlands, Swets Test Publisher: p. 5-15.

Westen, D., & Shelder, J. (1999). Revising and assessing Axis II, Part I: Development of a clinically and empirically valid assessment method. *American Journal of Psychiatry*, *156*, 258-72.

Westen, D., & Shelder, J. (1999). Revising and assessing Axis II, Part II: Toward an empirically based and clinically useful classification of personality disorders. *American Journal of Psychiatry, 156,* 273-85.

Zimmerman, M. (1994). Diagnosing personality disorders: A review of issues and research methods. *Archives of General Psychiatry, 51*,225-45.

PART E

General discussion and Clinical Implication

CHAPTER 9

Results of the search for Personality Disorder screening tools: Clinical Implications

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(a longer version is submitted, the chapter is a shorter version so that we did not repeat too much information)

ABSTRACT

This article examines the characteristics, validity, post-test probabilities as well as screening abilities of eight different instruments predicting personality disorders (PDs).

Method: The screening instruments were examined in three prospective, observational, test development studies in three random samples of Dutch psychiatric outpatients, using the SCID-II as the gold standard. In three studies, eight assessment instruments were examined: three short questionnaires [the Standardized Assessment of Personality- Abbreviated Scale (SAPAS), the Iowa Personality Disorder Screen (IPDS), and a short version of the SCID-II (S-SCID-II)], two longer questionnaires [the SCID-II Personality Questionnaire (SCID PQ) and the NEO Five-Factor Inventory (NEO-FFI)], one short semi-structured interview [the Quick Personality Assessment Schedule (PAS-Q)], and two informant-based interviews [the Standardised Assessment of personality (SAP) and the Standardized Assessment of Personality- Abbreviated Scale for informants (SAPAS-INF)] studied.

Results: According to the SCID II, in various studies, between 48.1 percent and 64.1 percent of the patients were suffering from a PD. The SAPAS-SR, the IPDS and the PAS-Q had the best sensitivity and specificity. Moreover, they correctly classified the largest number of patients. Using the SAPAS-SR, the IPDS or the PAS-Q raises the chance that the patient in an outpatient population received a PD diagnose from 50 % to 80-84%.

Conclusion: The results provide evidence for the usefulness of the SAPAS-SR, the IPDS and the PAS-Q instruments for PD screening. Because the PAS-Q takes a longer time and needs qualified personnel to administer, we recommend the use of the SAPAS-SR or the self-report version of the IPDS.

INTRODUCTION

In Western countries, the median prevalence for personality disorders (PDs) is 13% for general populations, 50% for outpatient populations and 70% for inpatient and forensic populations (Adel et al., 2006; Zimmerman, Rothschild & Chelminske, 2005). Early recognition of these frequently occurring PDs is extremely important, because they cause serious psychosocial problems (Alneas & Torgersen, 1997; Farmer & Nelson-Gray, 1990; Shea & Widiger, 1992) and can hinder the course and the treatment of psychiatric disorders. Although PD, looking at these statistics, should thus be a frequent diagnosis in the daily praxis of psychiatric hospitals, both clinically and in outpatient care, this appears not to be the case. An important reason for this underdiagnosis might be the lack of two aspects of an adequate diagnostic procedure reflecting content and form. As to the content, doctors generally feel more at ease with the fluctuating state aspects of Axis-1 (Diagnostical Statistical Manual (DSM)), than with the more enduring aspects of Axis-2 (DSM). Regarding the form - because the diagnosis of PD is built on the presence of long existing characteristics, clinicians might be reluctant to do so in the first encounter with a patient who is complaining about Axis-1 problems. Patients with a PD take a lot of time of the staff at a hospital during office hours and beyond. If the PD of a patient is not taken into account, then the overall treatment will probably stagnate or produce a reverse effect (Moran et al., 2003a; Newton-Howes, Tyrer & Johnson, 2006).

To attain the most efficient and adequate treatment, it is important that PDs are detected early in the process.

Literature shows, that the reliability of the clinical assessment in determining psychiatric disorders, including PDs, has often been found to be rather dubious (Spitzer & Fleiss, 1974). Attempts to identify this unreliability led to three sources of variance: (i) information variance, (ii) observation, and (iii) interpretation variance and criterion variance (Hodiamont, 1986; Rijnders, 2008). Information variance can occur if different clinicians use different information sources about the patient or if the patient gives them different information. Observation and interpretations variance implies that different clinicians who get the same information will remember or describe or weight the information differently and, therefore, interpret the information differently. Criterion variance occurs in those situations that clinicians use different criteria for categories of psychopathological phenomena. The publication of the third version of the Diagnostical and Statistical Manual (DSM-III) successfully cancelled out criterion variance. By introducing the (training in) standardized clinical-psychiatric interviews, variances at the level of information, observation and interpretation variances were reduced substantially. The disadvantage of standardized clinical-psychiatric interviews, however, is that they are often time-consuming, and always have to be conducted by experienced, well-trained professionals (Dingemans & Sno, 2004). To limit these disadvantages, a screening tool can be used.

The screening principle means that people are subjected to a quick test, in order to differentiate between likely cases and non-cases. It should be kept in mind that screening

tests have a global diagnostic value. Specific diagnoses can only be attained by a much more far-reaching procedure, which of course takes more time and requires extensive expertise. Therefore, a screening instrument can be useful in a two-stage procedure for case identification. Patients with a positive result on the screening scale should be interviewed subsequently with a detailed (semi-) structured interview aimed at the assessment of a specific PD.

There are two kinds of screening instruments for PD: short (semi-) structured) interviews and questionnaires. Examples of structured interviews are the Standardised Assessment of Personality-Abbreviated Scale (SAPAS; Moran et al., 2003b), the Iowa Personality Screen (IPDS; Langbehn et al., 1999), the Rapid Personality Assessment Schedule (PAS-R; Van Horn et al., 2000), and the Quick Personality Assessment (PAS-Q; Tyrer, 2000). These instruments employ the same source of information: the patient. Consequently, the quality of the data collected is very much dependent on the capability and willingness of the patient to provide a factual picture and a truthful report. Furthermore, it should be kept in mind that those reports might be colored by the psychiatric problems of the patients (Zimmerman, 1994). A solution could be found in employing a screening instrument that uses one or more informants as source of information. Examples of such short informant-based interviews are the Standardised Assessment of Personality (SAP;Mann et al., 1981,Mann et al., 1999), and the Standardised Assessment for Personality-Abbreviated Scale for Informants (SAPAS-INF).

Questionnaires to be filled in by patients themselves, obviously do not take much of the clinician's time. With respect to the reliability issue, the interviewer's observer and interpretation variance have been excluded; on the other hand, the respondent's interpretation variance plays a major role. To minimize the criterion variance, it is important that the questionnaires are based on a standardized diagnostic system, such as the DSM-IV. An example of a short questionnaire that can be filled in within10 minutes is the self-report version of the Iowa Personality Disorder Screen (IPDS; Morse & Pilkonis, 2007). A longer questionnaire is the SCID-II personality questionnaire (SCID PQ; Ekselius et al., 1994) which is based on a categorical system. An example of a questionnaire based on a dimensional system is the NEO-FFI (Costa & McCrae, 1992; Hoekstra, Ormel, & De Fruyt, 2003).

In this article, we compare eight different screening instruments taking into account the different practical circumstances and the psychometric values. In addition we discuss the clinical implications of the outcomes of these comparisons. Data were collected in three different studies.

METHOD

Participants

In all three studies psychiatric outpatients were examined who were referred to GGZ Breburg, a Community Mental Health Centre (CMHC) in Tilburg, the Netherlands, between 2004 and 2009. The studies were approved by the Regional Medical Ethical Committee. The first study (I) was performed from March 2004 to March 2005 with 195 participants. The second study (II) was performed from October 2006 to January 2007 with 102 participants, and the third study (III) was performed from January 2008 and October 2009 with 79 participants. The distribution, according to sex, was 42.6 % males and 57.4% females (Study I), 40.2% males and 59.8% females (Study II), and 43 % males and 57 % females (Study III). The mean age of the participants was: 32.7 (Study I), 33.7 (Study II), and 34.3 (Study III).

Measures

Study I examined three short questionnaires (the SAPAS-SR (Germans et al., 2008), the IPDS (Germans et al., 2010), the S-SCID-II (Germans et al, 2010)), as well as a longer questionnaire (the NEO-FFI), and a structured interview (the PAS-Q). Study II focussed on a longer questionnaire (the SCID- PQ; Hilderson et al.). In study III, two informant-based interviews were employed: the SAP and the SAPAS-INF. Table 1 depict the different characteristics of these screenings instruments (see Table 1).

Table 1 *Practical characteristics of the different screening instruments*

	SAPAS-SR	IPDS	S- SCID-II	SCID -PQ	PAS-Q	NEO-FFI	SAP	SAPAS-INF
Type of instrument	Self-Rating	Self-Rating	Self-Rating	Self-Rating	Semi-Structured Interview	Self-Rating	Semi-Structured Interview	Structured Interview
Ratee	P[1]	P[1]	P[1]	P [1]	P[1]	P[1]	I[2]	I[2]
Rater	P[1]	P[1]	P[1]	P[1]	P[1]	P[1]	CS[3]	NCS[4]
Length (min.)	5-10	5-10	5-10	30-45	15	30	30	5-10
Number of items	8	11	10	119	6[5] 6-32[6]	240	14[5] 14-90[6]	8
Personell	NQ[4]	NQ[4]	NQ[4]	NQ[4]	Q[3]	Q[3]	Q[3]	NQ[4]
Classification system	ICD/DSM	DSM	DSM	DSM	ICD	-	ICD/DSM	ICD/DSM
Resultsscore	Total score	Total score	Total score	Total score Subtotal score for all the different DSM-IV PDs	Total score Subscore for all the different ICD PDs	5 domain scores according the Big Five.	Total score Subscore for all the ICD-10 and DSM-IV PDs	Total score

Note: [1]= Patient, [2]= Informant, [3]= Qualified staff, [4]=Not Qualified staff, [5]= general questions, [6]= minimal-maximum questions in total.

In all three studies, the SCID-II (First et al., 1995; Weertman, Arntz, & Kerkhof, 1997) was the gold standard. The SCID-II interview is a semi-structured interview to determine regular PDs, according to the DSM-IV-TR criteria (APA), as well as passive-aggressive and depressive PDs, as stated in the DSM-IV appendix. The interview starts with a series of open questions, intended to provide the interviewer with insight into the behavior, the interpersonal relationships, and the reflective abilities of the patient. Then, there are 134 items with more structured questions, grouped around the specific PDs. In scoring these, the interviewer has to take into account the level of deviation, continuity, and pervasiveness. In case of schizotypical, schizoid, theatrical and narcissistic PDs, it is also required to take the patient's observed behavior into account.

A personality feature can be scored as: *not present* (1), *present to a limited extent* (2), or *present* (3). In scoring, not only the patient's answer to the question is important, but the interviewer has to take all available sources of information into account.

The reliability and the internal consistency of the SCID-II interview proves satisfactory (Maffei et al., 1997), also for the Dutch population, with a Kappa (κ) of 0.63 (Weertman, Arntz, & Kerkhof, 1997; Weertman et al., 2003).

To adequately conduct the SCID-II interview, the researchers were trained in the technical aspects of conducting an interview. This training was offered by the staff of the Regional Institute for Continuing Education and Training.

Procedure

In all three studies, the procedure was roughly the same.The process of randomization contains one daily blind draw out of the full set of referrals. This was executed by the secretary of the intake desk. After drawing, inclusion and exclusion criteria were checked and in case of eligibility the invitation letter was send. In case of non-eligibility no second draw was done that day. Exclusion criteria were: inability to undergo the protocol due to severe mental illness, illiteracy, dyslexia, mental retardation, severe visual or auditive handicaps, cerebral damage, or refusal to participate. In addition to the invitation letter, there was a meeting in which eligible patients received verbal information along with the opportunity to ask questions. After this procedure, all patients were asked to sign an informed consent form. The SAPAS-SR, the IPDS, the S-SCID-II, the SCID-PQ and the PAS-Q were completed at the initial clinical appointment. The researcher who conducted the SCID-II interview was blind to the results of the SAPAS, IPDS, S-SCID-II, and SCID-PQ. The SCID-II interview was conducted one week later. The four screenings tests were repeated two to three weeks after the initial assessment.

The SAP and the SAPAS-INF were conducted as face-to face interviews with an informant in a routine standardised diagnostic process. The researcher was blind for earlier obtained information concerning the patient or the SCID-II interview results.

Analysis

All data were analysed using the Statistical Package for Social Sciences (SPSS 12, SPSS Inc., Chicago, IL). Test-retest reliability at the level of the total SAPAS-SR, IPDS, and S-SCID-II-score was determined with Pearson correlation coefficients. Test-retest reliability of the separate items was determined using Phi coefficients for binary data. Internal consistency was examined using Cronbach's alpha coefficients (Cronbach, 1951). Cronbach's alphas will generally increase, when the correlations between the items of a scale increase (Schmitt, 1996).

Receiver Operating Characteristic (ROC) analysis was used to study the effect on the predictive values for the presence of a PD as diagnosed with the SCID-II of the cut-off levels of scores on the SAPAS-SR, the IPDS, the S-SCID-II, and the PAS-Q-score. The ROC analysis relies heavily on sensitivity and specificity values and is a widespread method for examining the overall performance of a test (Hanley, 1989). Each point on the curve corresponds to a specific pair of sensitivity and specificity. Inspection of the curve will be useful for finding an optimal cut-off value for use in decision-making. The total area under the ROC-curve is a measure of the performance of the diagnostic instrument, since it reflects the test performance at all possible cut-off levels (Westin, 2001).

To compare the different screening instruments likelihood ratios were calculated. The likelihood ratio incorporates the sensitivity and specificity of the test and provides a direct estimate of how much a test result will change the odds of having a PD. The likelihood ratio for a positive result (LR+) says how much the odds of having a PD increase, when a test is positive. The likelihood ratio for a negative result (LR-) indicates how much the odds decrease, when the test is negative.

The combination of the likelihood ratio with information about the prevalence of PD and characteristics of the patient pool determines the post-test odds of PD. The post-test probability (Ptp) describes the proportions of patients with that particular test result who have a PD or have not a PD (post-test odds/[1 + post-test odds]).

RESULTS

The prevalence of PD in the different studies were: 50%, with the mean number of PDs in patients diagnosed any PD of 1.8 (Study I), 64.1% with the mean number of PDs of 2.2 (Study II), and 48.1% with the mean number of PDs in patients diagnosed with any PD of 1.6 (Study III).

Table 2 shows the psychometric values of the different screenings instruments.

With the prescribed cut-off scores the SCID-PQ overrated dramatically. When we increased the cut-off score with 3 the percentages of patients that correctly were classified increased from 62% to 75%. The SAPAS-SR, the IPDS and the PAS-Q perform the best in terms of the sensitivity and specificity for having 'any PD'. Moreover, they reached the highest number of patients that were correctly classified. The test-retest coefficient turned out to be high for the four following screening instruments: the SAPAS-SR, the IPDS, S-SCID-II, and the PAS-Q.

To assess the screening potential of the various instruments in a consistent way, five characteristics, and the balance between them, are important: sensitivity, specificity, the positive predictive value (PPV), the negative predictive value (NPV), and the number of correctly classified patients. Table 3 shows the rules of thumb that were used to evaluate the screening instruments for their capacity to screen. These rules describe six categories, every category has its own description of all five characteristics.

Table 2 *Sensitivity, specificity, and the power to predict 'any personality disorder' for the different screening instruments*

	SAPAS-SR	IPDS	S-SCID-II	SCID-PQ	PAS-Q	NEO-FFI	SAP	SAPAS-INF
Sensitivity	83	77	78	100 / 78*	80	63	69	76
Specificity	80	85	78	27 / 78*	82	35	76	58
PPV	80	83	78	100/75*	81	48	84	77
NPV	82	79	78	27/74*	81	50	58	57
Correctly classified	81	81	78	62 / 75*	80	49	72	70
Internal consistency	0.45	0.64	0.67		0.35			
Test-rest	0.89	0.87	0.94		0.94			

Note: PPV=positive predictive value; NPV=negative predictive value; *= adjusted cut-off score(+3)

Table 3 *Rules of Thumb to assess the screenings instruments*

Category	Criterium 1		Criterium 2
++	5 of the 5 ≥ 0.80		
+	4 of the 5 ≥ 0.80	And	0 of the 5 ≤ 0.50
	Or		
	5 of the 5 ≥ 0.70	And	0 of the 5 ≤ 0.50
±	3 of the 5 ≥ 0.80	And	0 of the 5 ≤ 0.50
	Or		
	4 of the 5 ≥ 0.70	And	0 of the 5 ≤ 0.50
	Or		
	5 of the 5 ≥ 0.60	And	0 of the 5 ≤ 0.50
-	2 of the 5 ≥ 0.80	And	Max. 1 of the 5 ≤ 0.50
	Or		
	3 of the 5 ≥0.70	And	Max.1 of the 5 ≤ 0.50
	Or		
	4 of the 5 ≥ 0.60	And	Max.1 of the 5 ≤ 0.50

Table 3 (*Continued*)

Category	Criterium 1		Criterium 2
--	0 or 1 of the 5≥ 0.80	And	Max. 2 of the 5≤ 0.50
	Or		
	2 of the 5 ≥ 0.70	And	Max.2 of the 5 ≤ 0.50
	Or		
	3 of the 5 ≥ 0.60	And	Max.2 of the 5 ≤ 0.50
---	3 or more ≤ 0.60		

Note: the five characteristics are: sensitivity, specificity, PPV, NPV and the percentage correctly classified, for example: 5 of the 5 characteristics ≥ 0.80 means that all the five characteristics have a value of 0.80 or more.

For example, category ++ means that all the five characteristics (sensitivity, specificity, PPV, NPV and the percentage correctly classified) are equal or exceed 0.80.

Table 4 shows the screening capacity results for all the screenings instruments for (i) 'any PD', (ii) a specific cluster of PDs, and (iii) a specific PD.

Table 4 *The performance of the different screenings instruments predicting different categories from any PD to a specific PD following the rules of thumb (Table 3)*

	SAPAS-SR	IPDS	S-SCID-II	SCID-PQ***	PAS-Q	NEO-FFI	SAP	SAPAS-INF
Any PD	++	+	+	+	++	---	±	--
Cluster:								
Cluster A	--	--	-	-	--		--	---
Cluster B	-	±	-	-	+		--	--
Cluster C	--	-	--	-	±		---	--
Specific PD:								
Paranoid	-	--	-	±	--		-	---
Schizoid	---	--	---	*	--		*	*
Schizotypal	---	--	---	*	**		*	*
Borderline	-	-	-	+	±		+	--
Histrionic	---	-	---	*	-		--	---
Narcissistic	-	-	-	--	**		--	---
Antisocial	-	--	-	++	-		--	---
Avoidant	-	-	-	--	-		-	---
Dependent	--	--	-	--	-		--	---
Obs. Comp.	--	--	---	--	--		-	---
NOS	--	-	--	--	**		--	---

*Note: * this specific PD was not present in the study sample; ** this PD is not present in the ICD-10 and, therefore, is not measured; *** with the adjusted cut off scores.*

The SAPAS, the IPDS, the short version of the SCID-II and the PAS-Q are the best screeners for any PD. With normal cut-off scores the SCID-PQ turned out to overrate dramatically and thus is classified in the category -. Only after adapting the cut-off scores with +3 the categorization could rise to category +. The NEO-FFI is classified as the poorest screener for 'any PD'.

If there is need to screen for a specific PD, for instance, the Borderline PD or the Anti-social PD, one might use the SAP and the SCID-PQ, respectively.

Table 5 shows the likelihood ratio's and the post-test probabilities (Ptp) for a positive and a negative test outcome.

Table 5 *The likelihood ratios and the post-test probabilities of the different screening instruments in different populations*

	SAPAS-SR	IPDS	S-SCID-II	SCID-PQ*	PAS-Q	NEO-FFI	SAP	SAPAS-INF
LHR +[1]	4.1	5.1	3.5	3.2	4.4	0.97	2.9	1.8
LHR –[2]	0.2	0.3	0.3	0.4	0.2	1.1	0.4	0.4
Ptp[3]+ general populations	38	43	34	32	40	13	30	21
Ptp[3] + outpatient populations	80	84	78	76	81	49	74	64
Ptp[3] + clinical populations	91	92	89	88	91	69	87	81
Ptp[3]- general populations	15	21	21	26	15	49	26	26
Ptp[3]- outpatient populations	9	13	13	17	9	35	17	17
Ptp[3]-clinical populations	6	8	8	11	6	25	11	11

Note: [1]= Likelihood ratio +; [2]= Likelihood ratio-; [3]=post-test probabilities; *=adapted cut-off scores

The SAPAS-SR, the IPDS, and the PAS-Q appeared to have the best Ptp and raised the odds in the outpatient population from 50 to 80-84% after a positive test outcome. The SAPAS-SR and the PAS-Q reduced the odds from 50 to 9% after a negative test outcome.

DISCUSSION

The goal of this article was to provide busy clinicians a powerful screening tool for PDs that is time-efficient and easy to administer, while accurate and, therefore, useable in clinical practice.

The self-report version of the SAPAS and the IPDS perform best and are easy to administer. They do not require qualified personnel and take only 5 minutes to complete.

The findings should be interpreted in the light of a number of limitations. First, not all the PDs were present in all the studies, notably the schizoid and Schizotypal PD were absent. Participants with a single Cluster A PD can easily become false negatives. This, however, is a minor problem, because only a small number of participants have a single cluster A PD; not only in our samples, but also in other studies (e.g., Bernstein, Useda & Siever, 1995). The fact that some cluster B PDs (e.g.,Histrionic) are not represented probably also is a minor limitation due to co-morbidity with other PDs.

Second, the validation studies were performed with an interviewer that was blind to the outcome of the different instruments, except for the PAS-Q. For practical reasons the interviews were performed by the same person (SG). To minimize possible bias this interviewer refrained from reviewing the results of the interview and from filing the information in the patients' dossier. We are aware that this procedure, forced by practical considerations reflecting the institute's daily clinical practice, does not represent the best possible design. However, we feel that the risk of bias is presumably low due to the fact that the number of interviewees was rather high, the time interval between the interviews were rather lengthy, and inspection of patients' records in preparation of the interviews did not take place. Moreover, the fact that the correspondence between both PAS-Q and the SCID-II interviews were similar provides also a convincing argument for the relative absence of bias.

Third, the rules of thumb to assess the screenings instruments that we used has not a theoretical background. There is, as far as we know, no model known in the (inter)national literature. We are aware that with the use of such a model we simplify the reality, not in all situations is it important to have a good balance between the five characteristics. In specific situation could one prefer some high characteristic at the cost of others. But for a more global evaluation of the available screening instruments we choose to compare them categorical by this model.

Finally, a possible fly in the ointment could be the differences in prevalence of PDs across the three studies. It should be noted that the prevalence of PDs is a powerful determinant of how useful a particular diagnostic instrument will be. The prevalence of PD in Study II was higher than in the other two studies. The prevalence of Study I and Study III are more or less similar compared with the results of other (inter)national studies (e.g.,Masthoff & Trompenaars, Zimmerman, Rothschild & Chelminski, 2005). Furthermore, the mean of PD in the patient that had a PD was higher in Study II in comparison with Study I and III. It seems that the sample in Study II was slightly different, they seem sicker. This can be due to the fact that in Study II

there was a higher percentage of drop out. For future research it is, therefore, important that all screening instruments are examined in the same sample.

We concluded that it is possible to use a screen in a two-step procedure for case finding, The SAPAS-SR and the IPDS are the preferred screeners.

REFERENCES

Adel, A., Grimm, G., Mogge, N.L., et al. (2006).Prevalence of personality disorders at a rural state psychiatric hospital. *Journal of Rural Community Psychology*, Vol.*E9*, Nr.1, Spring.

Alnaes, R., & Torgersen,S. (1997). Personality and personality disorders predict development and relapses of major depression. *Acta Psychiatrica Scandinavica, 95*,336–342.2.

American Psychiatric Association (1994). *Diagnostic and Statistical Manual of Mental Disorders* (4th edition) (DSM-IV). Washington, DC: APA.

Bernstein, D.P., Useda, D., & Siever, L.J. (1995). Paranoid personality disorder. In W.J. Livesly (Eds.), *The DSM-IV personality disorders* (pp. 45-57). London: The Guilford Press.

Costa PJ, McCrae R. *Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI) Professional Manual.* Odessa, FL: Psychological Assessment Resources, 1992.

Cronbach, L.J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, *16*, 297-334.

Dingemans, P.M.A.J., & Sno, H.N.(2004). Meetinstrumenten bij persoonlijkheidsstoornissen. *Tijdschrift voor Psychiatrie* 46,10, 705-709.

Ekselius, L., Lindstrom,E., Von Knorring, L., et al. (1994). SCID II interviews and the SCID Screen questionnaire as diagnostic tools for personality disorders in DSM-III-R. *Acta Psychiatrica Scandinavica,* 90, 120-123.

Farmer, R.F., Nelson-Gray, R.O. (1990). Personality disorders and depression: Hypothetical relations, empirical findings, and methodological Considerations. *Clinical Psychology Review* ,*10*,453–476.

First, M.B., Spitzer, R.L., Gibbon, M., & Williams, J.B.W. (1995). The structured clinical interview for DSM-III-R personality disorders (SCID-II): Part I: Description. *Journal of Personality Disorders, 9*, 92-104.

Germans, S., Van Heck, G.L., Langbehn, D.R., & Hodiamont, P.P.G. (2010). The Iowa Personality Disorder Screen (IPDS): Preliminary results of the validation of a self-administered version in a Dutch population. *European Journal of Psychological Assessment, 26*,11-18.

Germans, S., Van Heck, G.L., Masthoff, E.D., Trompenaars, F.J.M. & Hodiamont P.P.G. Hodiamont (2010). Diagnostic efficiency among psychiatric outpatients of a self-report version of a subset of screen items of the structured Clinical Interviw for DSM-IV-TR Personality Disorders (SCID-II), *Psychological Assessment*, *22*, 945-952.

Germans, S., Van Heck, G.L., Moran, P., & Hodiamont, P.P.G. (2008). The Self-report Standardized Assessment of Personality-abbreviated Scale: Preliminary results of a brief screening test for personality disorders. *Personality and Mental Health, 2*, 70-76.

Hanley, J.A. (1989). Receiver Operating Characteristic (ROC) methodology: The state of the art. *Critical Reviews in Diagnostic Imaging*, *29*, 307-335.

Hilderson, K.M.I., Germans, S., Rijnders, C.A.Th., Van Heck, G.L., & Hodiamont P.P.G.Validatie van de SCID-II persoonlijkheidsvragenlijst binnen een poliklinische psychiatrische populatie, *Psychopraktijk*, in press

Hodiamont, P.P.G. (1986). *Het zoeken van zieke zielen*. Doctoral Dissertation, Nijmegen, the Netherlands*: KatholiekeUniversiteit Nijmegen.*

Hoekstra HA, Ormel J, De Fruyt. NEO-FFI Big five Persoonlijkheidsvragenlijst. Swets & Zeitlinger B.V., Lisse. The Nederlands, 2003.

Langbehn, D.R., Pfohl, B.M., Reynolds, S., Clark, L.A., Battaglia, M., Bellodi, L., Cadoret, R., Grove, W., Pilkonis, P., & Links, P. (1999). The Iowa Personality Disorder Screen: Development and preliminary validation of a brief screening interview. *Journal of Personality Disorders, 13,*75-89.

Maffei, C., Fossati, A., Agostoni, I., Barraco, A., Bagnato, M., Deborah, D., et al. (1997). Interrater reliability and internal consistency of the structured clinical interview for DSM IV axis II personality disorder (SCID II) version 2.0. *Journal of Personality Disorders, 11,* 85-92.

Mann, A.H., Jenkins, R., Cutting, J.C., & Cowen, P.J. (1981).The development and use of a Standardized Assessment of Abnormal Personality. *Psychological Medicine, 11*, 839-847.

Mann, A.H., Raven, P., Pilgrim, J., Khanna, S., Velayudham, A., Suresh, K.P., et al. (1999). An assessment of the Standardised Assessment of Personality as a screening instrument for the international personality examination: A comparison of informant and patient assessment for personality. *Psychological Medicine, 29,*985-989.

Masthoff, E.D.M., & Trompenaars, A.J.W.M. (2006). *Quality of life in psychiatric outpatients.* Doctoral Dissertation. Tilburg, The Netherlands: Tilburg University.

Moran, P., Leese, M., Lee, T., Walter, P., Thornicroft, G., & Mann, A. (2003a). Standardised Assessment of Personality- Abbreviated Scale (SAPAS): Preliminary validation of a brief screen for personality disorder. *British Journal of Psychiatry, 183*, 228-232.

Moran, P., Walsh, E., Tyrer, P., Burns, T., Creed, F., & Fahy, T. (2003b). The impact of co-morbid personality disorder on violence in psychosis – data from the UK700 trial. *British Journal of Psychiatry, 182,* 129-134.

Morse, J.Q., & Pilkonis, P.A. (2007). Screening for personality disorders. *Journal of Personality Disorders, 21,* 179-198.

Newton-Howes, G., Tyrer, P., & Johnson, T. (2006). Personality disorder and the outcome of depression: Meta-analysis of published studies. *British Journal of Psychiatry, 188*, 13-20.

Rijnders C.A. Th.(2008). *Case counting considered; Psychiatric epidemiology and clinical judgement.* Doctoral Dissertation, Tilburg, the Netherlands: Tilburg University.

Schmitt, N. (1996) Uses and abuses of coefficient alpha. *Psychological Assessment*, *8*, 350-353.

Shea, M.T., Widiger, T.A., & Klein M.H. (1992). Comorbidity of personality disorders and depression. Implications for treatment. *Journal of Consulting and Clinical Psychology, 60,* 857-868.

Spitzer, R.L. & Fleiss, J.L. (1974). A re-analysis of. the reliability of psychiatric diagnosis. *British Journal of Psychiatry, 125*, 341–347.

Tyrer, P. (2000). Quick Personality assessment Schedule: PAS-Q. In P. Tyrer (eds.), *Personality disorders: diagnosis, management and course* 2nd edition (pp181-190). London: Arnold.

Van Horn, E., Manley, C., Leddy, D., Cicchetti, D., & Tyrer, P. (2000). Problems in developing an instrument for the rapid assessment of personality status. *European Psychiatry, 15* (suppl. 1), 29-33.

Weertman, A., Arntz, A., Dreessen, L., van Velzen, C., & Vertommen, S. (2003). Short-interval test-retest interrater reliability of the Dutch version of the Structured Clinical Interview for DSM-IV personality disorders (SCID-II). *Journal of Personality Disorders*, *17,* 562-567.

Weertman, A., Arntz, A., & Kerkhofs, M.L.M. (1997*). Gestructureerd Klinisch Interview voor de DSM-III Persoonlijkheidsstoornissen* [Structured Clinical Interview for the DSM-III personality disorders]. Lisse, The Netherlands: Swets Test Publisher.

Westin, L.K. (2001). *Receiver Operating Characteristic (ROC) analysis. Evaluating discriminance effects among decision support systems.* Umeå, Sweden: Umeå University, Department of Computing Science.

Zimmerman M.(1994). Diagnosing personality disorders: A review of issues and research methods. *Archives of General Psychiatry 51*, 225-245.

Zimmerman, M., Rothschild L, & Chelminski,I (2005).The Prevalence of DSM-IV Personality Disorders in Psychiatric Outpatients. *American Journal of Psychiatry*, *162*, 1911–1918.

CHAPTER 10

Concluding Remarks and Future Prospects

OBJECTIVES

The major goal of this thesis was to provide busy clinicians one or more powerful screening tools for personality disorders (PDs), which are time-efficient and easy to administer, while at the same time, useable in clinical practice.

General conclusions

From the eight screening instruments, that were examined in these studies, the Standardised Assessment of Personality- Abbreviated Scale (SAPAS-SR), the Iowa Personality Disorder Screen (IPDS), and the Quick Personality Assessment (PAS-Q) appeared to have the best post-test probabilities reflecting a raise of the odds in the outpatient population from 50 to 80-84%. The SAPAS-SR and the PAS-Q give the best reduction of the odds in the outpatient populations with a reduction from 50 to 9%. Due to the fact that the SAPAS-SR takes less time and does not require classified personnel, this screener is preferable over the PAS-Q.The Standardised Assessment of Personality (SAP) is useful if one wants to screen for a Borderline PD or if the patient is not able to react on the other instruments adequately.

Shortcomings of this research and general limitations

One of the major objectives in clinical research is to prevent errors, another is to complete the study at a reasonable cost in time and money and find the best compromise between this goals. The studies were performed at GGZ Midden-Brabant (GGZ Breburg), a Community Mental Health Centre (CMHC) in the city of Tilburg, the Netherlands. The project was incorporated as much as possible in the institute's daily clinical practice. Forced by practical considerations, we could not always completely avoid to have some shortcomings in the procedure of this research. Errors lead to limitations of the generalization the results. We shall discuss first some rather specific shortcomings. Thereafter, more general limitations will be discussed.

SHORTCOMINGS OF THIS RESEARCH PROJECT

Although the validation studies were performed with an interviewer that was blind to the outcome of the different screening instruments, this was not the case for the PAS-Q (Chapter 7). This fact might be a possible source of bias. However, the number of interviewees was rather high, the time intervals were rather lengthy, and inspection of patients' records in preparation of the interviews did not take place. So, we think that the risk of bias is rather low. Moreover, the fact that the correspondence between *both* the PAS-Q interviews and the SCID-II administration were rather similar provides also a convincing argument for the relative absence of bias. We are, however, fully aware that this procedure does not represent the best possible design. Therefore, future research should eliminate this possible source of bias by using consistently independent interviewers. The reason that we decided to study the PAS-Q under less than optimal research conditions is that we had the opportunity to contribute to its validation, which is not, so frequent done, in international literature.

In Chapter 8, the SAP and the informant version of the Standardised Assessment of Personality- Abbreviated Scale (SAPAS-INF) were examined. The advantage of using an informant as information source is that the information is not dependent on the capability and willingness of the patient to provide a factual picture and truthful report. The results were, however, somewhat disappointing. This could be due to the procedure that was followed in the project. In line with recent international research, we have asked patients to determine which informant they wanted to invite for the interview. This could be a person that was deliberately selected in order to give a more positive picture of the functioning of the patient. Furthermore, we have only asked one informant. Consequently, there is the risk that this chosen informant can only give adequate information on one particular area of the patient's functioning. In such a case, it would be difficult, if not impossible, to generalize information of one area in a patient's life to other areas. The international studies that examined the SAP (Mann et al., 1999) have roughly followed the same procedure as we did. So we can compare these, preciously. However, it is recommendable that future studies include more informants and that it is determined which function the informants have (e.g., parents and partners).
In the studies I and III (Chapters 2-8), the SCID-II interview was only performed by one person. This means that it was not possible to examine the interrater reliability. According to other studies, the psychometric properties of the Dutch version are fair to good (Weertman, Arntz, Dreessen, Van Velzen, & Vertommen, 2003). The interrater reliability (Cohen's Kappa) ranged from 0.77 for the Obsessive-Compulsive PD to 0.82 for the avoidant PD. The
overall Kappa was 0.80 (Arntz et al., 1992). These figures are comparable with the associations found in the study of Masthoff and Trompenaars (2006), who found for two well-trained and certified raters an overall Kappa of 0.87.

GENERAL LIMITATIONS

The three studies samples were randomly selected within the outpatient population during the diagnostic phase in a Community Mental Health Centre of a big city in the Netherlands. The number of patients involved were:195 (Study I), 102(Study II), and 79(Study III); the distribution according to sex was 42.6% and 57.4% (Study I), 40.2% and 59.8% (Study II), and 43% and 57% (Study III) for males and females, respectively. The mean age was 32.7 (Study I), 33.7 (Study II), and 34.3 years (Study III). The prevalence of PD in the different studies was: 50%, with the mean number of PDs in patients diagnosed any PD of 1.8 (Study I), 64.1% with the mean number of PDs in patients diagnosed any PD of 2.2 (Study II), and 48.1% with the mean number of PDs in patients diagnosed with any PD of 1.6 (Study III). In the second study, the number of PDs was higher than in the other two studies. In this study, the level of drop outs was sizeably higher than in the other two studies.

The biographical data and the number of PDs are consistent with the outcome of other national (Masthoff & Trompenaars, 2006) and international studies (e.g., Adel et al., 2006;

Zimmerman, Rothschild, & Chelminski, 2005). Therefore, these studies are presentable and useful for an outpatient population in the diagnostic phase.

Another problem concerns the fact that not all the PDs were present in all the studies. Notably the Schizoid PD and the Schizotypal PD were not represented. Thus, participants with a single Cluster A PD can easily become false negatives. However, this is a minor problem, because only a small number of participants have a single Cluster A PD; not only in our samples, but also in other studies (e.g., Bernstein, Useda, & Siever, 1995; Zimmerman, Rothschild & Chelminski, 2005). The fact that Cluster B PDs (e.g., Histrionic) are not represented is also a minor limitation. Co-morbidity with other PDs, for example the Borderline PD and the Narcissistic PD, prevents probably false negative cases.

Our exclusion criteria were: severe mental illness, illiteracy, dyslexia, mental retardation, severe visual or auditive handicaps and cerebral damage. This was determined by screening on all these criteria in the referral letter of the patient. All patients that finally participated were of Dutch origin. These exclusion criteria were employed because it was necessary that the patient was able to understand Dutch and read and write Dutch. If one uses exclusion and inclusion criteria, is it possible that one selects a rather specific sample. Therefore, it becomes more difficult to generalise the results to the total outpatient population.

The SCID-II interview was used as the gold standard. The use of this instrument as the criterion and gold standard might be questioned. However, it is widely used and its properties are well established. Furthermore, the use of the SCID-II made it possible to compare the present results with other (inter)national research outcomes.

THE FUTURE

As discussed in the introduction, there are models that examine personality and PDs from a very individual perspective (McAdams, 1987). These models differ markedly from the categorized thinking of the DSM-IV (APA). The way one looks at the disorders also influences the diagnosis. The discussion on this topic has been ongoing for years and has led to a working group that drafted a detailed proposal with large changes in the definition of PDs for the DSM-5 (DSM-5 workgroup). It is important to mention that still the DSM-5 is a model that is not founded on unorganic causes.

The DSM-5 work group (2010) recommends a re-conceptualization of personality psychopathology with core impairments in personality functioning, pathological personality traits, and prominent pathological personality types. PD is diagnosed when core impairments and pathological traits are severe or extreme and other criteria are met. The four-part assessment focuses attention on identifying personality psychopathology with increasing degrees of specificity, based on available time, information, and expertise. Assessment of personality functioning, types, and traits is intended for patients whether or not they have a PD. In the proposition of the DSM-5 there will be e reduction of the amount of PDs from 10 official DSM-

IV-TR PDs to 5 PDs, namely: The Avoidant PD, the Antisocial, the Schizotypal, the Obsessive-Compulsive and the Borderline PD, all with their own traits and facets.

These recommendations from the DSM-5 work group are challenging. It is a combination of categorical thinking with more dimensional information and can give a more detailed and individual overview of the patient's functioning. There are, however, several problems with these recommendations that makes working in the future with such a system quite difficult. The diagnosis of a PD in this new system is an intensive job that takes a lot of time for professionals. The challenge is to decide what is pathological and what is normal. Professionals should have enough training to describe PDs with dimensional knowledge and with an understanding of concepts like self-identity, identity integration, and self which are not used often in psychiatric daily praxis.

Because the examination for PD will take in future more time from the qualified staff, the screening process becomes increasingly important. Therefore, five professionals (two psychologists and three psychiatrists) with knowledge about PDs compared the four most promising screening instruments for DSM-IV PD with this proposal. Each item of each of the screening instruments was rated carefully in the light of the proposed descriptions for the new PD. For each instrument this was done by two of the five professionals, independently, from each other. Table 1 presents the personality type, the traits and facets, as well as, questions in the four screening instruments that focus on that personality type.

Table 1 *The overview of the DSM 5 PDs and their traits and facets and the corresponding screenings questions of the 4 most promising screening instruments*

Personality Types	Traits	Traits facets	Questions/Sections in the screening instruments			
			SAPAS	IPDS	S-SCID	PAS-Q
Avoidant			1/2/ 6/8	2/3/5	1 / 3 / 5	A /G/H
	Negative Emotionally	Anxiousness, Separation insecurity, Pessimism, Low self-esteem, Guilt/ shame	6/7	7	2 /3 /4 /5	B/G /H
	Introversion	Intimacy avoidance, Social withdrawal, Restricted affectivity, Anhedonia, Social Detachment	1 / 2	5/6	1	H
	Compulsivity	Risk aversion		5	1	
Antisocial			4/5	2/3/8/10/11	7 /10	C/D
	Antagonism	Callousness, Aggression, Manipulativeness, Hostility, Deceitfulness, Narcissism	4	2/8/11	7/10	C
	Disinhibition	Irresponsibility, Recklessness, Impulsivity	5	3	8	D

Table 1 *(Continued)*

Personality Types	Traits	Traits facets	Questions/Sections in the screening instruments			
			SAPAS	IPDS	S-SCID	PAS-Q
Schizotypal			1/ 2/ 3	4/5/6/9	6	A/B
	Schizotypy	Eccentricity, Cognitive dysregulation, Unusual perceptions, Unusual beliefs	2	5/6/7/9		B
	Introversion	Social withdrawal, restricted affectivity, Intimacy avoidance	1		1	B
	Negative Emotionality	Suspiciousness, Anxiousness	3 /6	4	5 / 6	A
Obssesive-Compulsive			8/ 6/ 1	10	4	F
	Compulsivity	Perfectionism, Rigidity, Orderliness, Perseveration	8	10		F
	Negative Emotionality	Anxiousness, Pessimism, Guilt/shame	6	10	4/5	G
	Introversion	Restricted affectivity				
	Antagonism	Oppositionality				
Borderline			1/4/5/7	1/3/4/6/7/9	3 / 8 /9/ 10	A/D/C/ E
	Negative Emotionality	Emotional lability, Self-harm, separation insecurity, anxiousness, low self-esteem, depressivity	6/7	1/7	3 / 4/5 /9	A/C /H
	Antagonism	Hostility, Aggression	4	8/3	10	A/C/E
	Disinhibition	Impulsivity	5	3	8	D
	Schizotypi	Dissociation proneness				

In conclusion, in the descriptions of the personality types, traits and facets, the questions of the four screening instruments are well presented. It can be stated that there is a great possibility that these instruments will be useful for screening of PD in a two-step diagnostic process for case finding.

REFERENCES

American Psychiatric Association (1994). *Diagnostic and Statistical Manual of Mental Disorders* (4th edition) (DSM-IV). Washington, DC: APA.

Adel A, Grimm G, Mogge NL, et al. Prevalence of Personality Disorders at a Rural State Psychiatric Hospital. Journal of Rural Community Psychology, 2006; Vol.E9, Nr.1, Spring.

Arntz, A., Van Beijsterveld, Hoekstra, B., Hofman, A., Eussen, M., & Sallaerts, s. (1992). The interrater reliability of a Dutch version of the Structured Clinical Interview for DSM-III Personality Disorders. *Acta Psychiatrica Scandinavica, 85,* 394-400.

Bernstein, D.P., Useda, D., & Siever, L.J. (1995). Paranoid personality disorder. In W.J. Livesly (Eds), *The DSM-IV personality disorders* (pp. 45-57). London: The Guilford Press.

DSM-5 work group (2010, September, second). Re: Personality and personality disorders. Retrieved from http://www.dsm5.org/Pages/Default.aspx

Mann, A.H., Raven, P., Pilgrim, J., Khanna, S., Velayudham, A., Suresh, K.P., et al. (1999). An assessment of the standardised assessment of personality as a screening instrument for the international personality examination: A comparison of informant and patient assessment for personality. *Psychological Medicine, 29,* 985-989

McAdams, D.P., & Pals, J.L. (2006) A New Big Five. Fundamental Priciples for a Integrative

Science of Personality. *American Psychologist, 3*, 204-217.

Masthoff, E.D.M., & Trompenaars, A.J.W.M. (2006). *Quality of life in psychiatric outpatients.* Doctoral Dissertation. Tilburg, the Netherlands: Tilburg University.

Weertman, A., Arntz, A., Dreessen, L., van Velzen, C., & Vertommen, S. (2003). Short-interval test-retest interrater reliability of the Dutch version of the Structured Clinical Interview for DSM-IV personality disorders (SCID-II). *Journal of Personality Disorders*, *17,* 562-567.

Zimmerman, M., Rothschild, L., & Chelminski, I. (2005). The prevalence of DSM-IV personality disorders in psychiatric outpatients. *American Journal of Psychiatry, 162*, 1911-1918.

CHAPTER 11

Dutch Summery

RESULTATEN VAN DE ZOEKTOCHT NAAR SCREENINGSINSTRUMENTEN VOOR PERSOONLIJKHEIDSSTOORNISSEN

Inleiding

In Westerse landen bedraagt de gemiddelde prevalentie van persoonlijkheidsstoornissen in algemene populaties 13%, in poliklinische populaties 50% en in intramurale en forensische populaties70%.[1,2] Vroege herkenning van deze veel voorkomende persoonlijkheidsstoornissen is van groot belang, omdat ze ernstige psychosociale problemen kunnen veroorzaken, en de behandeling van psychiatrische problemen kunnen belemmeren.[3-5] Hoewel persoonlijkheidsstoornissen met het oog op deze statistieken zowel klinisch als poliklinisch frequent gediagnosticeerd zouden moeten worden in de dagelijkse praktijk van psychiatrische ziekenhuizen, lijkt dit niet het geval te zijn. Een belangrijke reden voor deze onderdiagnose zou het ontbreken van twee belangrijke aspecten in een adequate diagnostische procedure kunnen zijn; inhoud en vorm. Met betrekking tot de inhoud voelen artsen zich in het algemeen meer op hun gemak met de fluctuerende aspecten van As-1 (DSM), dan met de duurzamere aspecten van As-2 (DSM). Aangezien de diagnose persoonlijkheidsstoornissen gebaseerd wordt op symptomen die langere tijd aanwezig zijn, zouden clinici terughoudend kunnen zijn om in de eerste ontmoeting met een patiënt die klaagt over As-1 problematiek, de diagnose persoonlijkheidsstoornis te stellen. Patiënten met een persoonlijkheidsstoornis nemen veel tijd van het ziekenhuispersoneel in beslag, zowel tijdens kantooruren als daarbuiten. Als er geen rekening wordt gehouden met de persoonlijkheidsstoornis van een patiënt, dan zal de totale behandeling waarschijnlijk stagneren.[6,7]

Om de meest efficiënte en adequate behandeling te bewerkstelligen, is het belangrijk dat persoonlijkheidsstoornissen in een vroeg stadium worden vastgesteld.

Uit de literatuur blijkt dat de betrouwbaarheid van de klinische beoordeling met betrekking tot het vaststellen van psychiatrische stoornissen, met inbegrip van persoonlijkheidsstoornissen, vaak nogal dubieus is. Pogingen om deze onbetrouwbaarheid te identificeren hebben geleid tot drie bronnen van variantie: (i) informatievariantie, (ii) observatievariantie, en (iii) interpretatie- en criteriumvariantie.[9,10] Informatievariantie kan zich voordoen als verschillende artsen gebruik maken van verschillende informatiebronnen ten aanzien van de patiënt of als de patiënt hen niet dezelfde informatie geeft. Observatie- en interpretatievariantie impliceert dat verschillende artsen die dezelfde informatie krijgen, deze informatie verschillend onthouden, beschrijven of waarderen, en de informatie dus anders interpreteren. Criteriumvariantie komt voor in situaties waarin artsen verschillende criteria gebruiken voor het categoriseren van psychopathologische verschijnselen. De publicatie van de derde versie van het Diagnostical and Statistical Manual (DSM-III) heeft criteriumvariantie met succes uitgesloten. Door (training in) gestandaardiseerde klinisch-psychiatrische interviews te introduceren zijn informatie-, observatie- en interpretatievarianties aanzienlijk verminderd. Het nadeel van gestandaardiseerde klinisch-

psychiatrische interviews is echter dat ze vaak tijdrovend zijn en dat ze altijd moeten worden uitgevoerd door ervaren, goed opgeleide professionals.[11] Om deze nadelen te beperken kan er een screeningsinstrument worden gebruikt.

Het screeningsprincipe houdt in dat mensen worden onderworpen aan een snelle test om onderscheid te maken tussen de waarschijnlijke en niet-waarschijnlijke aanwezigheid van persoonlijkheidsstoornissen. Bedenk dat screeningstesten een globale diagnostische waarde hebben. Specifieke diagnoses kunnen alleen worden gesteld door een diepergaande procedure, welke natuurlijk veel meer tijd in beslag neemt en uitgebreide expertise vereist. Daarom kan een screeningsinstrument nuttig zijn in een procedure die bestaat uit twee fasen ten aanzien van het identificeren van persoonlijkheidsstoornissen. Patiënten met een positief resultaat op de screeningsschaal moeten vervolgens worden geïnterviewd op basis van een gedetailleerd (semi-)gestructureerd interview dat gericht is op de vaststelling van een specifieke persoonlijkheidsstoornis.

Er zijn twee soorten screeningsinstrumenten voor persoonlijkheidsstoornissen: korte (semi-) gestructureerde) interviews en vragenlijsten. Voorbeelden van gestructureerde interviews zijn de Standardised Assessment of Personality-Abbreviated Scale (SAPAS), de Iowa Personality Screen (IPDS), de Rapid Personality Assessment Schedule (PAS-R), en de Quick Personality Assessment (PAS-Q).[12-15] Deze instrumenten maken gebruik van dezelfde informatiebron: de patiënt, hierdoor is de kwaliteit van de verzamelde gegevens sterk afhankelijk van het vermogen en de bereidheid van de patiënt om een feitelijk beeld en een waarheidsgetrouw verslag te geven. Voorts moet in gedachten worden gehouden dat deze verslagen gekleurd zouden kunnen zijn door de psychiatrische problematiek van de patiënt.[16] Een oplossing kan gevonden worden in de toepassing van een screeningsinstrument dat gebruik maakt van één of meerdere informanten als bron van informatie. Voorbeelden van dergelijke korte informanteninterviews zijn de Standardised Assessment of Personality (SAP), en de Standardised Assessment for Personality-Abbreviated Scale for Informants (SAPAS-INF). [17,18]

Vragenlijsten die de patiënt zelf moet invullen nemen uiteraard niet veel tijd van de arts in beslag. Met betrekking tot de betrouwbaarheidskwestie zijn de observatie- en interpretatievariantie van de interviewer uitgesloten. Aan de andere kant speelt de interpretatievariantie van de respondent wel een grote rol. Om criteriumvariantie te minimaliseren is het belangrijk dat de vragenlijsten gebaseerd zijn op een gestandaardiseerd diagnostisch systeem, zoals het DSM-IV. Een voorbeeld van een korte vragenlijst die binnen 10 minuten kan worden ingevuld, is de zelfrapportage-versie van de Iowa Personality Disorder Screen (IPDS).[19] Een langere vragenlijst is de SCID-II vragenlijst (SCID-PQ), welke gebaseerd is op een categoriaal systeem.[20] Een voorbeeld van een vragenlijst welke gebaseerd is op een dimensionaal systeem is de NEO-FFI. [21,22]

In dit proefschrift vergelijken we acht verschillende screeningsinstrumenten waarbij we rekening houden met de verschillende praktische omstandigheden en de psychometrische waarden. Daarnaast bespreken we de klinische implicaties van de uitkomsten van deze vergelijkingen. De gegevens werden verzameld in drie verschillende studies.

Methode

Deelnemers

In alle drie de studies namen poliklinische psychiatrische patiënten deel. Ze werden tussen 2004 en 2009 (opnieuw) verwezen naar GGZ Breburg in Tilburg, Nederland. De studies werden goedgekeurd door de Regionale Medische Ethische Commissie. De eerste studie (I) werd tussen maart 2004 en maart 2005 uitgevoerd met 195 deelnemers. De tweede studie (II) werd tussen oktober 2006 en januari 2007 uitgevoerd met 102 deelnemers, en de derde studie (III) werd tussen januari 2008 en oktober 2009 uitgevoerd met 79 deelnemers. De verdeling naar geslacht was als volgt: 42,6% mannen en 57,4% vrouwen (studie I), 40,2% mannen en 59,8% vrouwen (studie II), en 43% mannen en 57% vrouwen (studie III). De gemiddelde leeftijd van de deelnemers was: 32.7 (studie I), 33,7 (studie II), en 34.3 (studie III).

Metingen

Studie I onderzocht drie korte vragenlijsten [de SAPAS-SR (23), de IPDS (24), de S-SCID-II (25)], als ook een langere vragenlijst (de NEO-FFI), en een gestructureerd interview (de PAS-Q)23-25. Studie II was gericht op een langere vragenlijst (de SCID-PQ).[26] In studie III werden twee informanteninterviews onderzocht: de SAP en de SAPAS-INF.

Tabel 1 laat de verschillende practische kenmerken van deze screeningsinstrumenten zien (zie tabel 1).

SAPAS-SR

De SAPAS bestaat uit acht dichotome items, die overgenomen zijn uit de introductie van het semigestructureerde informanteninterview, de Standardised Assessment of Personality (SAP).[17,18] Elk item wordt gescoord met een 0 (afwezig) of een 1 (aanwezig), en de som van deze scores genereert de totaalscore, variërend van 0 tot 8. Moran, Leese, et al.[12.] valideerden de SAPAS in een steekproef van 60 volwassen psychiatrische patiënten, gerekruteerd uit ambulante, intramurale en semimurale units, met de Structured Clinical Interviews for DSM-IV Personality Disorders (SCID-II) als 'gold standard'. [27] Bij een afkappunt van 3 bedroegen de sensitiviteit en specificiteit van de SAPAS respectievelijk 0,94 en 0,85, en de positieve en negatieve predictieve waarden waren respectievelijk 0,89 en 0,92. Zelfs voor het afnemen van korte interviews is een specifieke klinische opleiding nodig. Het gebruik van de SAPAS zou kunnen verbeteren indien dit screeningsinterview kan worden uitgevoerd als een kort, zelfrapportage-interview (SAPAS-SR). De originele versie van de SAPAS werd door de auteurs vertaald naar het Nederlands en weer terug vertaald naar het Engels door het vertaalcentrum van de Universiteit van Tilburg.

Tabel 1 *De praktische kenmerken van de verschillende screeningsinstrumenten*

	SAPAS-SR	IPDS	S-SCID-II	SCID –PQ	PAS-Q	NEO-FFI	SAP	SAPAS-INF
Type instrument	Zelf invul	Zelf invul	Zelf invul	Zelf invul	Semi-gestructurerd Interview	Zelf invul	Semi - gestructurerd Interview	Gestructurerd Interview
Ondervraagde	P[1]	P[1]	P[1]	P [1]	P[1]	P[1]	I[2]	I[2]
Ondervrager	P[1]	P[1]	P[1]	P[1]	P[1]	P[1]	CS[3]	NCS[4]
Lengten (min.)	5-10	5-10	5-10	30-45	15	30	30	5-10
Aantal items	8	11	10	119	6[5] 6-32[6]	240	14[5] 14-90[6]	8
Personeel	NQ[4]	NQ[4]	NQ[4]	NQ[4]	Q[3]	Q[3]	Q[3]	NQ[4]
Classificatie system	ICD/DSM	DSM	DSM	DSM	ICD	-	ICD/DSM	ICD/DSM
Resultaten	Totaal score	Totaal score	Totaal score	Totaal score Subtotaal score for all the different DSM-IV PDs	Totaal score Subscore for all the different ICD PDs	5 domain scores accord-ing the Big Five.	Totaal score Subscore for all the ICD-10 and DSM-IV PDs	Totaal score

Noot: [1]= Patient, [2]= bekenden, [3]= Gekwalificeerd personeel, [4]=Niet gekwalificeerd personeel, [5]= algemene vragen, [6]= minimaal- maximal aantal vragen in totaal.

IPDS

De IPDS bestaat uit een selectie van 11 items die zijn afgeleid van de DSM-III-versie van het Structured Interview for DSM-III Personality Disorders (SIPD).[28,29] Deze items corresponderen met specifieke DSM-symptomen van verschillende persoonlijkheidsstoornissen. De originele selectie van deze items was volledig empirisch en het doel was om een kleine deelverzameling te identificeren binnen de SIDP die effectief zou screenen op de aan- of afwezigheid van persoonlijkheidsstoornissen (ongeacht het type), op basis van resultaten van de afname van het volledige SIDP.[13] De IPDS werd gevalideerd in een groep van 52 niet-psychotische extramurale en intramurale patiënten en de uitkomsten werden vergeleken met diagnoses die gebaseerd waren op de afname van de volledige SIPD-IV. [30]

In de oorspronkelijke publicatie spraken de auteurs niet over de sensitiviteit, specificiteit en predictieve waarden van de IPDS als geheel[13]. In plaats daarvan werden deze waarden voor elk afzonderlijk item gerapporteerd. Bovendien werden optimale afkappunten voor specifieke deelverzamelingen van items gepresenteerd. Zo werd een deelverzameling van 6 a priori items voorgesteld als een algemene screening. Hierdoor lieten de auteurs zien dat de sensitiviteit, specificiteit en predictieve waarden aanzienlijk verschilden voor specifieke deelverzamelingen van items. Uitstekende sensitiviteit (92%) en een goede specificiteit (79%) werden bereikt met de IPDS items 4-8, terwijl een deelverzameling bestaande uit de items 1, en 3-8 (dat wil zeggen, alle

items die afzonderlijk bewijs van onderscheidend vermogen toonden), toonden een sensitiviteit en een specificiteit van respectievelijk 79% en 86%. Omwille van deze veelbelovende resultaten adviseerden Langbehn et al.[13.] verder te experimenteren met alle 11 items van de IPDS. Het gebruik van het IPDS-interview als primair screeningsinstrument werd ook bestudeerd door Trull en Amdur [31] in een steekproef met 103 niet-klinische studenten. Deze vertoonde 53% sensitiviteit en 97% specificiteit voor de items 1 - 6, terwijl de items 1 en 3-8 een sensitiviteit van 84% en een specificiteit van 69% lieten zien.

Morse en Pilkonis[19] onderzochten de bruikbaarheid van een dergelijke zelfrapportage-versie met behulp van de SIPD-IV als referentie. Zij concludeerden dat hun zelfrapportage-versie zeer bevredigend was ten aanzien van steekproeven uit zowel een psychiatrische als niet-psychiatrische populatie. Voor een deelverzameling van IPDS items (item 1-6) waren sensitiviteit en specificiteit respectievelijk 97% en 46%, met een positief predictieve waarde van 90% en een negatief predictieve waarde van 71%.

De originele versie van de SAPAS werd naar het Nederlandse vertaald door de auteurs en weer terug vertaald naar het Engels door het vertaalcentrum van de Universiteit van Tilburg.

S-SCID-II

Voor de ontwikkeling van de korte zelfrapportage-versie van de SCID-II (S-SCID-II)werd gebruik gemaakt van de gegevens die verzameld zijn door Masthoff en Trompenaars. [32.]

As-II diagnoses werden vastgesteld met behulp van het SCID-II interview. Het onderzoek bestond uit 533 deelnemers waarvan 495 deelnemers het testboekje invulden (92,9%). Ter identificatie van de items die het best de SCID-II diagnoses voorspelden, werden ten eerste een reeks logistische regressieanalyses uitgevoerd. Bij het uitvoeren van deze logistische regressieanalyses voor het bepalen van de afhankelijke variabelen werden SCID-II gegevens voor elke afzonderlijke persoonlijkheidsstoornis gedichotomiseerd in *aanwezig* of *afwezig*. Voor elke afzonderlijke persoonlijkheidsstoornis werden alleen die items geselecteerd uit de totale set SCID-II items, met de bedoeling om een specifieke persoonlijkheidsstoornis vast te stellen die het grootste discriminerende vermogen had ten aanzien van het voorspellen van 'caseness', dat wil zeggen de aan- of afwezigheid van enige persoonlijkheidsstoornis volgens het SCID-II interview. Hierna werd, opnieuw met behulp van logistische regressieanalyses, deze set van potentiële voorspellers gebruikt om 'caseness' te voorspellen. De set van 10 items omvatte: Paranoïde (PAR1), Narcistisch (NAR1), Borderline (BRD4, BRD5, BRD8), Ontwijkend (AVD2), afhankelijk (DEP2), en depressief (DEPR2, DEPR4, DEPR6). Het volgende model past goed bij deze 10 voorspellers: χ^2 (10, N = 495) = 228.23, p <0,001. Het algehele voorspellende percentage was 76,0%. Onderzoek naar regressiecoëfficiënten, Wald-statistieken en significante niveaus van de afzonderlijke items toont aan dat alle 10 items significant bijdroegen aan de voorspelling van de aanwezigheid van1 of meer persoonlijkheidsstoornissen. Daarom werd besloten om deze set van 10 items als nuttig screeningsinstrument te accepteren. De S-SCID-II werd afgenomen als een zelfrapportage-instrument.

SCID-II PQ

De SCID-II Personality Questionnaire (Harcourt Test Publishers) is een rapport of een vragenlijst die patiënten zelf in moeten vullen. De vragenlijst bevat 134 gesloten vragen die overeenkomen met vragen in het SCID-II interview, waarbij de inleidende vragen en de observatie-items zijn verwijderd. Met positieve of negatieve antwoorden bepaalt de respondent zelf of de eigenschap aanwezig is. Drie internationale studies onderzochten de SCID-II vragenlijst die gebruikt werd als screeningsinstrument.[20,33,34] Ekselius et al.[20] voerden een studie uit met 69 psychiatrische patiënten en vergeleken het SCID-II interview en de SCID-II vragenlijst. Met betrekking tot de vragenlijst werd er een aanpassing van de afkappunten voorgesteld vanwege een hoge overschatting van 19%. Met de aangepaste afkappunten was er een overschatting van 4%, en de sensitiviteit en specificiteit bedroegen respectievelijk 87% en 75%. Ze vonden een kappa van 0,75 en de correlatie tussen het aantal criteria waaraan voldaan werd in het SCID-interview en de vragenlijst bedroeg 0,84. Soortgelijke gegevens werden gevonden in de studie die werd uitgevoerd door Jacobsberg et al.[33] waarbij de SCID-II vragenlijst werd onderzocht met de Personality Disorder Examination (PDE) als 'gold standard'.

NEO-FFI

Eén van de bekendste modellen voor het definiëren van persoonlijkheden middels een dimensionale benadering is het Big Five persoonlijkheidsmodel. Het Big Five model is een algemeen omvattend kader voor het structureren van individuele verschillen.[35,36] Het model kan worden gebruikt in alle culturen. De vijf dimensies zijn een reflectie van sociabiliteit (Extraversie), interpersoonlijke interactie (Altruisme), zelfdiscipline en impulsbeheersing (Conscientieusnesheid, beschrijven van taak-en doelgericht gedrag), persoonlijke aanpassing (Neuroticisme, contrasteren van emotionele stabiliteit met angst, boosheid en andere negatieve gevoelens), en openheid voor nieuwe ervaringen (Openheid, wat de breedte, diepte en complexiteit van het mentale en ervaringsgerichte leven weergeeft).

Costa en McCrea[35] hebben gesuggereerd dat het Big Five persoonlijkheidsmodel zeer relevant is voor de conceptualisering en de beoordeling van persoonlijkheidsstoornissen. Zij vinden dat het Big Five model het categorische systeem voor het identificeren van persoonlijkheidsstoornissen in het DSM-IV moet vervangen. Verschillende auteurs ondersteunen deze stelling.[37,38] Widiger, Costa en McCrae[39] beschrijven hoe persoonlijkheidsstoornissen kunnen worden geïnterpreteerd in termen van de Big Five dimensies. De NEO-FFI is gebaseerd op de Big Five dimensies, en is een zelfrapportage-instrument bestaande uit 60 items.[22]

PAS-Q

De Quick Personality Assessment Schedule (PAS-Q) is een verkorte versie van de ICD-10 versie van de PAS. Het afnemen ervan neemt ongeveer 15 minuten in beslag.[15] De PAS-Q kan gebruikt worden voor zowel patiënten als informanten, maar in de huidige studie waren alle

respondenten patiënten. Het PAS-Q interview begint met open vragen over het karakter, relaties, werkprestaties, drugsproblemen en onwettig gedrag om eventueel ontbrekende informatie over de patiënt te achterhalen. Er zijn acht specifieke items over persoonlijkheidsstoornissen, te weten: Wantrouwigheid & Gevoeligheid, Afstandelijkheid & Zonderling/Excentriciteit, Agressie & Ongevoeligheid, Impulsiviteit & onverantwoordelijkheid, Kinderachtigheid & Instabiliteit, Nauwgezetheid & Rigiditeit, Angstigheid & Verlegenheid, en Hulpeloosheid & Kwetsbaarheid. Elke item bevat twee screeningsvragen voor het identificeren van een specifieke persoonlijkheidsstoornis. Een positief antwoord leidt tot indringende vragen en uiteindelijk tot het scoren van de kenmerken in kwestie. De interviewer beoordeelt de ernst van de persoonlijkheidsstoornis binnen het item, en houdt hierbij rekening met de antwoorden op de inleidende vragen, de specifieke vragen, en de achtergrondinformatie over de patiënt. De PAS-Q onderscheidt vier niveaus: 0 (geen persoonlijkheidsstoornis), 1 (complexe persoonlijkheid), 2 (eenvoudige persoonlijkheidsstoornis), 3 (diffuse of complexe persoonlijkheidsstoornis). De originele versie van de PAS-Q is door de auteurs vertaald naar het Nederlands en terug vertaald naar het Engels door het vertaalcentrum van de Universiteit van Tilburg. Deze laatste vertaling was nagenoeg identiek aan de originele versie.

SAP

De Standardized Assessment of Personality (SAP) is een kort semigestructureerd informantinterview dat face-to-face of telefonisch wordt afgenomen.[17] Een introductiegedeelte bestaande uit 13 vragen gaat na of er bepaalde trefwoorden genoemd worden. Deze trefwoorden zouden vervolgens terug te leiden zijn naar verschillende categorieën persoonlijkheidsstoornissen. Er worden vragen gesteld zodat achterhaald kan worden of er aan voldoende criteria voldaan is en of er voldoende bewijs is dat deze criteria wijzen op de aanwezigheid van een ongemak of handicap. Als er geen trefwoorden voorkomen in de uit 13 vragen bestaande introductiefase, dan wordt het interview beëindigd en wordt er verondersteld geen sprake te zijn van een persoonlijkheidsstoornis.

De gemiddelde totale interbeoordelaarsbetrouwbaarheid (Cohen's Kappa) voor de SAP is 0,76, met een bereik van 0,60 tot 0,82.[40] De inter-informant betrouwbaarheid varieert van 0,96 tot 0,93.[41] De positieve en negatieve predictieve waarden van de SAP bedragen respectievelijk 47% en 97%.[18] Er werd geconcludeerd dat SAP een potentieel adequaat screeningsinstrument is bij een tweefasige aanpak in de epidemiologische beoordeling van een persoonlijkheidsstoornis. De oorspronkelijke versie van SAP is door de auteurs vertaald naar het Nederlands en terug vertaald naar het Engels door het vertaalcentrum van de Universiteit van Tilburg.

SAPAS-INF

De auteurs vertaalden de items van de oorspronkelijke SAPAS, een gestructureerd interview, en creëerden een zelfrapportage-vragenlijst, de SAPAS-SR. [12,23] De auteurs transformeerde de Nederlandse SAPAS-SR in een gestructureerd informanteninterview (SAPAS-INF).

SCID-II

In alle drie de studies was de SCID-II de 'gold standard'.[27,42] Het SCID-II interview is een semigestructureerd interview ter vaststelling van reguliere persoonlijkheidsstoornissen volgens de DSM-IV-TR criteria (APA), alsook passief-agressieve en depressieve persoonlijkheidsstoornissen zoals vermeld in de DSM-IV bijlage.[43] Het interview begint met een reeks open vragen, bedoeld om de interviewer inzicht te geven in het gedrag, de interpersoonlijke relaties en het reflecterend vermogen van de patiënt. Vervolgens zijn er 134 items met meer gestructureerde vragen, gegroepeerd rondom de specifieke persoonlijkheidsstoornis. Bij het scoren dient de interviewer rekening te houden met het afwijkingsniveau, continuïteit en pervasiviteit. In het geval van schizotypische, schizoïde, theatrale en narcistische persoonlijkheidsstoornissen is het ook nodig om rekening te houden met het waargenomen gedrag van de patiënt.
Een persoonlijkheidskenmerk kan gescoord worden als: *niet aanwezig* (1), *aanwezig in bepaalde mate* (2), of *aanwezig* (3). Bij het beoordelen is niet alleen het antwoord van de patiënt op de vraag van belang. De interviewer dient rekening te houden met alle informatiebronnen.

De betrouwbaarheid en de interne consistentie van het SCID-II interview bewijst bevredigend te zijn, ook voor de Nederlandse populatie, met een Kappa (κ) van 0,63.[42,44,45]

Om het SCID-II interview goed af te kunnen nemen werden de onderzoekers getraind in de technische aspecten van het afnemen van een interview. Deze training werd aangeboden door het personeel van het Regional Institute for Continuing Education and Training.

Procedure

In alle drie de studies verliep de procedure nagenoeg hetzelfde. Het randomisatieproces bestond uit een dagelijkse, blinde steekproef uit alle doorverwezen patiënten. Deze steekproef werd uitgevoerd door de secretaresse van het intake-bureau. Na het uitvoeren van de steekproef werden de inclusie- en uitsluitingscriteria gecontroleerd. Indien er sprake was van een match werd de uitnodigingsbrief verstuurd. In het geval er geen sprake was van een match, werd er die dag geen tweede steekproef genomen. Uitsluitingscriteria waren: het onvermogen om zich aan het protocol te houden als gevolg van een ernstige psychische aandoening, analfabetisme, dyslexie, mentale retardatie, ernstige visuele of auditieve handicaps, hersenbeschadiging, of de weigering om deel te nemen. In aanvulling op de uitnodigingsbrief werd er een bijeenkomst georganiseerd waarin geschikte patiënten verbaal informatie ontvingen en de gelegenheid hadden om vragen te stellen. Na deze procedure werd alle patiënten gevraagd om een toestemmingsformulier te ondertekenen. De SAPAS-SR, de IPDS, de S-SCID-II, de SCID-PQ en de

PAS-Q werden afgenomen tijdens de eerste klinische afspraak. De onderzoeker die het SCID-II interview afnam was niet op de hoogte van de resultaten van de SAPAS, IPDS, S-SCID-II en SCID-PQ. Het SCID-II interview werd één week later uitgevoerd. De vier screeningstesten werden twee tot drie weken na de eerste evaluatie herhaald.

De SAP en de SAPAS-INF werden uitgevoerd als face-to-face informanteninterviews als onderdeel van een routinematig gestandaardiseerd diagnostisch proces. De onderzoeker was niet op de hoogte van eerder verkregen informatie over de patiënt of van resultaten uit het SCID-II interview.

Analyse

Alle gegevens werden geanalyseerd met behulp van het Statistical Package for Social Sciences (SPSS 12, SPSS Inc, Chicago, IL). Test-hertest betrouwbaarheid op het niveau van de SAPAS-SR, IPDS, en S-SCID-II-score werd bepaald met Pearson correlatiecoëfficiënten. Test-hertest betrouwbaarheid van de afzonderlijke onderdelen werd bepaald met behulp van Phi coëfficiënten voor binaire data. Interne consistentie werd onderzocht met behulp van Cronbach's alpha coëfficiënten.[46] Cronbach's alpha's zullen over het algemeen toenemen wanneer de correlaties tussen de items op een schaal toenemen.[47]

De ROC-analyse (Receiver Operating Characteristic analysis) werd gebruikt om het effect op predictieve waarden – met betrekking tot de aanwezigheid van een persoonlijkheidsstoornis zoals gediagnosticeerd met de SCID-II - van de afkappunten van scores op de SAPAS-SR, de IPDS, de S-SCID-II, en de PAS-Q-score te onderzoeken. [48,49]

Om de verschillende screeningsinstrumenten met elkaar te vergelijken werden aannemelijkheidsverhoudingen (Likelyhoodratio's, LR) berekend. De LR omvat de sensitiviteit en specificiteit van de test en biedt een directe schatting van de mate waarin een testresultaat de kans op het hebben van een persoonlijkheidsstoornis zal veranderen. De LR voor een positief resultaat (LR+) laat de mate zien waarin de kans op het hebben van een persoonlijkheidsstoornis toeneemt, wanneer een test positief is. De LR voor een negatief resultaat (LR-) laat de mate zien waarin de kans op het hebben van een persoonlijkheidsstoornis afneemt, wanneer de test negatief is.

De combinatie van de LR met informatie over de prevalentie van de persoonlijkheidsstoornis en de kenmerken van de patiëntpopulatie bepaalt de post-test waarschijnlijkheid van een persoonlijkheidsstoornis. De post-test waarschijnlijkheid beschrijft de verhouding tussen patiënten met dat specifieke testresultaat die wel een persoonlijkheidsstoornis en patiënten die geen persoonlijkheidsstoornis (post-test waarschijnlijkheden/[1 + post-test waarschijnlijkheden]) hebben.

RESULTATEN

De prevalentie van persoonlijkheidsstoornissen in de verschillende studies was als volgt: 50%, met een gemiddelde van 1,8 (studie I) persoonlijkheidsstoornissen bij patiënten gediagnosticeerd met een persoonlijkheidsstoornis, 64,1%, met een gemiddelde van 2,2 (studie II) persoonlijkheidsstoornissen, en 48,1% met een gemiddelde van 1,6 (studie III) persoonlijkheidsstoornissen bij patiënten gediagnosticeerd met een persoonlijkheidsstoornis.

Tabel 2 laat de psychometrische waarden van de verschillende screeningsinstrumenten zien.

Tabel 2 *Sensitiviteit, specificiteit, en de voorspellende warden voor het voorpellen van 1 of meer persoonlijkheidsstoornis voor de verschillende screeningsinstrumenten*

	SAPAS-SR	IPDS	S-SCID-II	SCID-PQ	PAS-Q	NEO-FFI	SAP	SAPAS-INF
Sensitiviteit	83	77	78	100 / 78*	80	63	69	76
Specificiteit	80	85	78	27 / 78*	82	35	76	58
PPV	80	83	78	100/75*	81	48	84	77
NPV	82	79	78	27/74*	81	50	58	57
Correct gekwalificeerd	81	81	78	62 / 75*	80	49	72	70
Interne consistentie	0.45	0.64	0.67		0.35			
Test-retest	0.89	0.87	0.94		0.94			

Noot: PPV=positief voorspellende waarden; NPV=negatief voorspellende waarden; *= aangepaste cut-off scoren(+3)

Met het voorgeschreven afkappunt liet de SCID-PQ een dramatische overschatting zien. Toen we het afkappunt verhoogden met 3, nam het percentage patiënten dat correct werd geclassificeerd toe van 62% naar 75%. De SAPAS-SR, de IPDS en de PAS-Q presteren het beste in termen van sensitiviteit en specificiteit m.b.t. het hebben van *'enige persoonlijkheidsstoornis'*. Bovendien bereikten deze screeninginstrumenten het hoogste aantal correct geclassificeerde patiënten. De test-hertest coëfficiënt bleek hoog te zijn voor de vier volgende screeningsinstrumenten: de SAPAS-SR, de IPDS, S-SCID-II, en de PAS-Q.

Om het screeningspotentieel van de verschillende instrumenten op een consistente manier te beoordelen, zijn vijf kenmerken, en het evenwicht tussen deze kenmerken van belang: sensitiviteit, specificiteit, de positief predictieve waarde, de negatief predictieve waarde, en het aantal correct geclassificeerde patiënten. Tabel 3 voorziet in de vuistregels die gebruikt werden om de screeningsinstrumenten op hun screeningscapaciteit te beoordelen. Deze vuistregels beschrijven zes categorieën.

Tabel 3 *Vuistregels voor de beoordeling van de screeningscapaciteit van de screeningsinstrumenten*

Categorie	Criterium 1		Criterium 2
++	5 van de 5 ≥ 0.80		
+	4 van de 5 ≥ 0.80	En	0 van de 5 ≤ 0.50
	Of		
	5 van de 5 ≥ 0.70	En	0 van de 5 ≤ 0.50
±	3 van de 5 ≥ 0.80	En	0 van de 5 ≤ 0.50
	Of		
	4 van de 5 ≥ 0.70	En	0 van de 5 ≤ 0.50
	Of		
	5 van de 5 ≥ 0.60	En	0 van de 5 ≤ 0.50
-	2 van de 5 ≥ 0.80	En	Max. 1 van de 5 ≤ 0.50
	Of		
	3 van de 5 ≥0.70	En	Max.1 van de 5 ≤ 0.50
	Of		
	4 van de 5 ≥ 0.60	En	Max.1 van de 5 ≤ 0.50
--	0 of 1 van de 5≥ 0.80	En	Max. 2 van de 5≤ 0.50
	Of		
	2 van de 5 ≥ 0.70	En	Max.2 van de 5≤ 0.50
	Of		
	3 van de 5 ≥ 0.60	En	Max.2 van de 5 ≤ 0.50
---	3 of meer ≤ 0.60		

Noot: de vijf eigenschappen zijn: sensitiviteit, specificiteit, PPV, NPV en het percentage goed gekwalificeerd,bijvoorbeeld: 5 van de 5 eigenschappen ≥ 0.80 betekend dat alle 5 eigenschappen hebben en waarden van 0,80 of meer.

Elke categorie heeft zijn eigen beschrijving van de vijf kenmerken. Categorie + + betekent bijvoorbeeld dat alle vijf kenmerken (sensitiviteit, specificiteit, positief predictieve waarde, negatief predictieve waarde en het percentage correct geclassificeerd) gelijk zijn aan of hoger zijn dan 0,80.

Tabel 4 toont de resultaten m.b.t. de screeningscapaciteit voor alle screeningsinstrumenten voor (i) 'enige persoonlijkheidsstoornis', (ii) een specifiek cluster van persoonlijkheidsstoornissen en (iii) een specifieke persoonlijkheidsstoornis.

Tabel 4 *De prestatie tav het voorspellen van verschillende categorien, van 1 of meer persoonlijkheidsstoornissen tot een specifieke persoonlijkheidsstoornis volgens de vuistregels van tabel 3.*

	SAPAS-SR	IPDS	S-SCID-II	SCID-PQ***	PAS-Q	NEO-FFI	SAP	SAPAS-INF
1 of meer PD	++	+	+	+	++	---	±	--
Cluster:								
Cluster A	--	--	-	-	--		--	---
Cluster B	-	±	-	-	+		--	--
Cluster C	--	-	--	-	±		---	--
Specifieke PD:								
Paranoid	-	--	-	±	--		-	---
Schizoid	---	--	---	*	--		*	*
Schizotypisch	---	--	---	*	**		*	*
Borderline	-	-	-	+	±		+	--
Theatraal	---	-	---	*	-		--	---
Narcissistisch	-	-	-	--	**		--	---
Antisociaal	-	--	-	++	-		--	---
Ontwijkend	-	-	-	--	-		-	---
Afhankelijk	--	--	-	--	-		--	---
Obs. Comp.	--	--	---	--	--		-	---
NOS	--	-	--	--	**		--	---

*Noot: * deze specifieke persoonlijkeidsstoornis is niet aanwezg in het studiegroep; **deze persoonlijkheidsstoornis id niet aanwezig in de ICD-10 en daarom niet gemeten; ***met de aangepaste cut off scores.*

De SAPAS, de IPDS, de korte versie van de SCID-II en de PAS-Q vormen de beste screeningsinstrumenten voor het vaststellen van ´enige persoonlijkheidsstoornis´. Met normale afkappunten bleek de SCID-PQ dramatisch te overschatten en is dus ingedeeld in de categorie -.Pas na aanpassing van het afkappunt met +3 kon de categorisatie ingedeeld worden in de categorie +. De NEO-FFI is geclassificeerd als het slechtste screeningsinstrument voor 'enige persoonlijkheidsstoornis'.

Als het nodig is om een specifieke persoonlijkheidsstoornis te screenen, bijvoorbeeld de borderline persoonlijkheidsstoornis of de antisociale persoonlijkheidsstoornis, kan men gebruik maken van respectievelijk de SAP en de SCID-PQ.

Tabel 5 laat de LR en de post-test waarschijnlijkheden zien voor een positieve en een negatieve testuitslag.

Tabel 5 *The likelihood ratio's en de post-test waarschijnlijkheid van de screeninginstrumneten in verschillende bevolkingsgroepen*

	SAPAS-SR	IPDS	S-SCID-II	SCID-PQ*	PAS-Q	NEO-FFI	SAP	SAPAS-INF
LHR +[1]	4.1	5.1	3.5	3.2	4.4	0.97	2.9	1.8
LHR –[2]	0.2	0.3	0.3	0.4	0.2	1.1	0.4	0.4
Ptp[3]+algemene bevolking	38	43	34	32	40	13	30	21
Ptp[3] + poliklinische populatie	80	84	78	76	81	49	74	64
Ptp[3] + klinische populatie	91	92	89	88	91	69	87	81
Ptp[3]- algemene bevolking	15	21	21	26	15	49	26	26
Ptp[3]- poliklische populatie	9	13	13	17	9	35	17	17
Ptp[3]-klinische populatie	6	8	8	11	6	25	11	11

Noot: [1]= Likelihood ratio +; [2]= Likelihood ratio-; [3]=post-test waarschijnlijkheid; *=aangepaste cut-off scores

De SAPAS-SR, de IPDS en de PAS-Q leken de beste post-test waarschijnlijkheden te hebben en lieten deze in de poliklinische populatie toenemen van 50 tot 80-84% na een positief testresultaat. De SAPAS-SR en de PAS-Q verlaagden de waarschijnlijkheid van 50 tot 9% na een negatief testresultaat.

DISCUSSIE

Het doel van dit artikel was om drukbezette clinici te voorzien van een efficiënt en gemakkelijk te hanteren hulpmiddel voor het screenen van persoonlijkheidsstoornissen dat tegelijkertijd accuraat en derhalve bruikbaar zou zijn in de klinische praktijk.

De zelfrapportage-versie van de SAPAS en de IPDS komen als beste uit de bus en zijn eenvoudig uit te voeren. Ze vereisen geen gekwalificeerd personeel en nemen slechts 5 minuten tijd in beslag.

Deze resultaten moeten worden geïnterpreteerd in het licht van een aantal beperkingen. Ten eerste waren niet alle persoonlijkheidsstoornissen aanwezig in alle studies. De schizoïde en schizotypische persoonlijkheidsstoornis waren met name afwezig. Deelnemers met enkel een cluster-A persoonlijkheidsstoornis kunnen gemakkelijk valse negatieven geven. Dit is echter een minder relevant probleem, omdat slechts een klein aantal deelnemers enkel een cluster A persoonlijkheidsstoornis had; niet alleen in onze steekproeven, maar ook in andere studies.[50] Het feit dat sommige cluster-B persoonlijkheidsstoornissen (bijv., ontwijkend) niet vertegenwoordigd

zijn, is waarschijnlijk ook slechts een kleine beperking vanwege de co-morbiditeit met andere persoonlijkheidsstoornissen.

Ten tweede werden de validatiestudies uitgevoerd met een interviewer die niet op de hoogte was van de uitkomsten van de verschillende instrumenten, met uitzondering van de PAS-Q. Om praktische redenen werden de interviews uitgevoerd door dezelfde persoon (SG). Om mogelijke bias van deze interviewer te minimaliseren, zag de interviewer af van het herzien van de resultaten en van de indiening van de informatie in het patiëntendossier. We zijn ons ervan bewust dat deze procedure, waarvoor gekozen is uit praktische overwegingen die de dagelijkse klinische praktijk van het instituut weerspiegelen, niet het best mogelijke design vertegenwoordigt. Toch denken wij dat het risico van bias vermoedelijk laag zou zijn vanwege het feit dat het aantal geïnterviewden vrij hoog was, het tijdsinterval tussen de interviews nogal lang was, en er geen onderzoek plaatsvond naar patiëntdossiers in voorbereiding op de interviews. Het feit dat de correspondentie tussen de PAS-Q en de SCID-II interviews vergelijkbaar was, voorziet ook in een overtuigend argument voor de relatieve afwezigheid van bias.

Ten derde kennen de vuistregels die we hebben gebruikt voor de beoordeling van de screeningsinstrumenten geen theoretisch kader. Er is, voor zover wij weten, in de (inter) nationale literatuur geen model bekend. We zijn ons ervan bewust dat we met het gebruik van een dergelijk model de werkelijkheid vereenvoudigen. Het is niet in alle situaties belangrijk om een goede balans te hebben tussen de vijf kenmerken. In specifieke situaties zou de aanwezigheid van bepaalde kenmerken ten koste kunnen gaan van andere kenmerken. Maar voor een meer globale evaluatie van de beschikbare screeningsinstrumenten kiezen we ervoor om ze categorisch te vergelijken met behulp van dit model.

Ten slotte zijn de verschillen in prevalentie van persoonlijkheidsstoornissen in de drie studies een punt van aandacht. Opgemerkt moet worden dat de prevalentie van persoonlijkheidsstoornissen een krachtige determinant is van hoe nuttig een bepaald diagnostisch instrument zal zijn. De prevalentie van persoonlijkheidsstoornissen in studie II was hoger dan in de andere twee studies. De prevalentie van studie I en III studie zijn min of meer vergelijkbaar met de resultaten van andere (inter)nationale studies.[32, 2] Bovendien is het gemiddelde aantal persoonlijkheidsstoornissen in een patiënt met minst 1 persoonlijkheidsstoornis hoger in studie II in vergelijking met studies I en III. Het lijkt erop dat de steekproef in studie II net iets anders was, de populatie lijkt zieker. Dit kan te wijten zijn aan het feit dat er in studie II er sprake was van een hoger drop-out percentage. Voor toekomstig onderzoek is het daarom belangrijk dat alle screeningsinstrumenten binnen dezelfde steekproef worden onderzocht.

We concludeerden dat het mogelijk is om een screeningsinstrument te gebruiken in een tweefasige procedure voor casefinding. De SAPAS-SR en de IPDS zijn de geprefereerde screeningsinstrumenten.

REFERENCES

Adel, A., Grimm, G., Mogge, N.L., et al. (2006).Prevalence of personality disorders at a rural state psychiatric hospital. *Journal of Rural Community Psychology*, Vol.*E9*, Nr.1, Spring.

Alnaes, R., & Torgersen,S. (1997). Personality and personality disorders predict development and relapses of major depression. *Acta Psychiatrica Scandinavica, 95*,336–342.2.

American Psychiatric Association (1994). *Diagnostic and Statistical Manual of Mental Disorders* (4th edition) (DSM-IV). Washington, DC: APA.

Bernstein, D.P., Useda, D., & Siever, L.J. (1995). Paranoid personality disorder. In W.J. Livesly (Eds.), *The DSM-IV personality disorders* (pp. 45-57). London: The Guilford Press.

Costa PJ, McCrae R. *Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI) Professional Manual.* Odessa, FL: Psychological Assessment Resources, 1992.

Cronbach, L.J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, *16*, 297-334.

Dingemans, P.M.A.J., & Sno, H.N.(2004). Meetinstrumenten bij persoonlijkheidsstoornissen. *Tijdschrift voor Psychiatrie* 46,10, 705-709.

Ekselius, L., Lindstrom,E., Von Knorring, L., et al. (1994). SCID II interviews and the SCID Screen questionnaire as diagnostic tools for personality disorders in DSM-III-R. *Acta Psychiatrica Scandinavica,* 90, 120-123.

Farmer, R.F., Nelson-Gray, R.O. (1990). Personality disorders and depression: Hypothetical relations, empirical findings, and methodological Considerations. *Clinical Psychology Review* ,*10,*453–476.

First, M.B., Spitzer, R.L., Gibbon, M., & Williams, J.B.W. (1995). The structured clinical interview for DSM-III-R personality disorders (SCID-II): Part I: Description. *Journal of Personality Disorders, 9*, 92-104.

Germans, S., Van Heck, G.L., Langbehn, D.R., & Hodiamont, P.P.G. (2010). The Iowa Personality Disorder Screen (IPDS): Preliminary results of the validation of a self-administered version in a Dutch population. *European Journal of Psychological Assessment, 26*,11-18.

Germans, S., Van Heck, G.L., Masthoff, E.D., Trompenaars, F.J.M. & Hodiamont P.P.G. Hodiamont (2010). Diagnostic efficiency among psychiatric outpatients of a self-report version of a subset of screen items of the structured Clinical Interviw for DSM-IV-TR Personality Disorders (SCID-II), *Psychological Assessment*, *22*, 945-952.

Germans, S., Van Heck, G.L., Moran, P., & Hodiamont, P.P.G. (2008). The Self-report Standardized Assessment of Personality-abbreviated Scale: Preliminary results of a brief screening test for personality disorders. *Personality and Mental Health, 2*, 70-76.

Hanley, J.A. (1989). Receiver Operating Characteristic (ROC) methodology: The state of the art. *Critical Reviews in Diagnostic Imaging*, *29*, 307-335.

Hilderson, K.M.I., Germans, S., Rijnders, C.A.Th., Van Heck, G.L., & Hodiamont P.P.G.Validatie van de SCID-II persoonlijkheidsvragenlijst binnen een poliklinische psychiatrische populatie, *Psychopraktijk*, in press

Hodiamont, P.P.G. (1986). *Het zoeken van zieke zielen*. Doctoral Dissertation, Nijmegen, the Netherlands*: KatholiekeUniversiteit Nijmegen.*

Hoekstra HA, Ormel J, De Fruyt. NEO-FFI Big five Persoonlijkheidsvragenlijst. Swets & Zeitlinger B.V., Lisse. The Nederlands, 2003.

Langbehn, D.R., Pfohl, B.M., Reynolds, S., Clark, L.A., Battaglia, M., Bellodi, L., Cadoret, R., Grove, W., Pilkonis, P., & Links, P. (1999). The Iowa Personality Disorder Screen: Development and preliminary validation of a brief screening interview. *Journal of Personality Disorders, 13,*75-89.

Maffei, C., Fossati, A., Agostoni, I., Barraco, A., Bagnato, M., Deborah, D., et al. (1997). Interrater reliability and internal consistency of the structured clinical interview for DSM IV axis II personality disorder (SCID II) version 2.0. *Journal of Personality Disorders, 11,* 85-92.

Mann, A.H., Jenkins, R., Cutting, J.C., & Cowen, P.J. (1981).The development and use of a Standardized Assessment of Abnormal Personality. *Psychological Medicine, 11*, 839-847.

Mann, A.H., Raven, P., Pilgrim, J., Khanna, S., Velayudham, A., Suresh, K.P., et al. (1999). An assessment of the Standardised Assessment of Personality as a screening instrument for the international personality examination: A comparison of informant and patient assessment for personality. *Psychological Medicine, 29,*985-989.

Masthoff, E.D.M., & Trompenaars, A.J.W.M. (2006). *Quality of life in psychiatric outpatients.* Doctoral Dissertation. Tilburg, The Netherlands: Tilburg University.

Moran, P., Leese, M., Lee, T., Walter, P., Thornicroft, G., & Mann, A. (2003a). Standardised Assessment of Personality- Abbreviated Scale (SAPAS): Preliminary validation of a brief screen for personality disorder. *British Journal of Psychiatry, 183*, 228-232.

Moran, P., Walsh, E., Tyrer, P., Burns, T., Creed, F., & Fahy, T. (2003b). The impact of co-morbid personality disorder on violence in psychosis – data from the UK700 trial. *British Journal of Psychiatry, 182,* 129-134.

Morse, J.Q., & Pilkonis, P.A. (2007). Screening for personality disorders. *Journal of Personality Disorders, 21,* 179-198.

Newton-Howes, G., Tyrer, P., & Johnson, T. (2006). Personality disorder and the outcome of depression: Meta-analysis of published studies. *British Journal of Psychiatry, 188*, 13-20.

Rijnders C.A. Th.(2008). *Case counting considered; Psychiatric epidemiology and clinical judgement.* Doctoral Dissertation, Tilburg, the Netherlands: Tilburg University.

Schmitt, N. (1996) Uses and abuses of coefficient alpha. *Psychological Assessment*, *8*, 350-353.

Shea, M.T., Widiger, T.A., & Klein M.H. (1992). Comorbidity of personality disorders and depression. Implications for treatment. *Journal of Consulting and Clinical Psychology, 60,* 857-868.

Spitzer, R.L. & Fleiss, J.L. (1974). A re-analysis of. the reliability of psychiatric diagnosis. *British Journal of Psychiatry, 125*, 341–347.

Tyrer, P. (2000). Quick Personality assessment Schedule: PAS-Q. In P. Tyrer (eds.), *Personality disorders: diagnosis, management and course* 2nd edition (pp181-190). London: Arnold.

Van Horn, E., Manley, C., Leddy, D., Cicchetti, D., & Tyrer, P. (2000). Problems indeveloping an instrument for the rapid assessment of personality status. *EuropeanPsychiatry, 15* (suppl. 1), 29-33.

Weertman, A., Arntz, A., Dreessen, L., van Velzen, C., & Vertommen, S. (2003). Short-interval test-retest interrater reliability of the Dutch version of the Structured Clinical Interview for DSM-IV personality disorders (SCID-II). *Journal of Personality Disorders*, *17,* 562-567.

Weertman, A., Arntz, A., & Kerkhofs, M.L.M. (1997*). Gestructureerd Klinisch Interview voor de DSM-III Persoonlijkheidsstoornissen* [Structured Clinical Interview for the DSM-III personality disorders]. Lisse, The Netherlands: Swets Test Publisher.

Westin, L.K. (2001). *Receiver Operating Characteristic (ROC) analysis. Evaluating discriminance effects among decision support systems.* Umeå, Sweden: Umeå University, Department of Computing Science.

Zimmerman M.(1994). Diagnosing personality disorders: A review of issues and research methods. *Archives of General Psychiatry 51*, 225-245.

Zimmerman, M., Rothschild L, & Chelminski,I (2005).The Prevalence of DSM-IV Personality Disorders in Psychiatric Outpatients. American Journal of Psychiatry, 162, 1911–1918.

APPENDIX I

THE SELF-REPORT STANDARDISED ASSESSMENT OF PERSONALITY-ABBREVIATED SCALE (SAPAS-SR)

Naam:
Datum:

Dit zijn een aantal vragen over uw gedachten en gevoelens. Uw antwoorden zullen helpen beter te begrijpen hoe u gewoonlijk bent. Als u zich de afgelopen weken of maanden anders bent gaan voelen, beantwoordt de vragen dan vanuit hoe u zich voorheen voelde.

Wilt u omcirkelen wat voor u van toepassing is:

1. Heeft u in het algemeen moeite met het maken en behouden van vrienden? Ja / Nee

2. Zou u zichzelf als een typische eenling beschrijven? Ja / Nee

3. Heeft u in het algemeen vertrouwen in andere mensen? Ja / Nee

4. Heeft u gewoonlijk moeite uw zelfbeheersing te bewaren? Ja / Nee

5. Bent u impulsief van aard? Ja / Nee

6. Maakt u zich gewoonlijk snel zorgen? Ja / Nee

7. Hebt u in het algemeen de neiging sterk op andere te leunen? Ja / Nee

8. Bent u in het algemeen een perfectionist? Ja / Nee

APPENDIX II

IOWA PERSONALITY DISORDER SCREEN-SELF REPORT VERSION (IPDS)

Naam:
Datum:

Dit zijn een aantal vragen over uw gedachten en gevoelens. Uw antwoorden zullen helpen beter te begrijpen hoe u gewoonlijk bent. Als u zich de afgelopen weken of maanden anders bent gaan voelen, beantwoordt de vragen dan vanuit hoe u zich voorheen voelde.

Wilt u omcirkelen wat voor u van toepassing is:

1. Sommige mensen hebben vaak stemmingswisselingen alsof ze dagelijks heen en weer geslingerd worden.Hun stemming kan bijvoorbeeld meerdere malen op een dag vaak wisselen van boos naar somber naar angstig. Geldt dat ook voor u? Ja / Nee

   (Zo ja:) hebt u dat de meeste tijd van uw leven gehad? Ja / Nee

2. Sommige mensen houden er van om in het middelpunt van de belangstelling te staan, terwijl anderen liever op de achtergrond blijven. Hoe zou u uzelf beschrijven, in het middelpunt? Ja / Nee

   (Als in het middelpunt:) Stoort het u als iemand anders in het middelpunt van de belangstelling staat? Ja / Nee

3. Wilt u vaak onmiddellijk uw zin krijgen, zelfs als iets wat langer afwachten meer zou opleveren? Ja / Nee

   Hebt u vaak problemen op uw werk of in uw vriendenkring omdat u aanvankelijk ergens enthousiast aan begint maar dan uw belangstelling verliest en daarom de zaak niet voortzet? Ja / Nee

4. Vindt u dat de meeste mensen misbruik van u zullen maken als u te veel over uzelf laat weten. Ja / Nee

5. Voelt u zich in het algemeen nerveus of angstig in het gezelschap van mensen? Ja / Nee

   Vermijdt u situaties waarin u met nieuwe mensen moet omgaan? Ja / Nee

6**.** Vermijdt u om mensen te leren kennen uit angst dat zij u niet aardig zouden kunnen vinden? Ja / Nee

(Zo ja,) Heeft dit effect op het aantal vrienden dat u heeft? Ja / Nee

7. Doet u zichzelf telkens weer op een andere manier voor omdat u eigenlijk niet weet wie u echt bent? Ja / Nee

Hebt u vaak het gevoel dat u meningen zo sterk veranderen dat u niet goed meer weet wat uw mening eigenlijk is? Ja / Nee

8. Wordt u vaak boos of geïrriteerd omdat mensen uw speciale talenten of prestaties niet in die mate erkennen als ze zouden moeten doen? Ja / Nee

9. Verdenkt u andere mensen die u kent ervan dat ze u proberen te misleiden of gebruik van u proberen te maken? Ja / Nee

(Zo ja,) maakt u zich daar veel zorgen om?

Ja / Nee

10. Bent u geneigd mensen lange tijd zaken kwalijk te nemen of negeert u mensen dagenlang door tegen hen te zwijgen? Ja / Nee

11. Raakt u geïrriteerd als vrienden of familieleden klagen over hun problemen? Ja / Nee

Klagen mensen over het feit dat u niet erg meevoelt als zij problemen hebben? Ja / Nee

APPENDIX III

DUTCH VERSION OF THE SELF-REPORT VERSION OF THE STRUCTURED CLINICAL INTERVIEW FOR DSM-IV PERSONALITY DISORDER II SCREEN

Naam:
Datum:

De volgende vragen zijn om te weten te komen wat voor iemand u bent, dit wil zeggen hoe u zich meestal voelt. Ik weet dat u problemen hebt of hebt gehad, ik wil dat u niet deze tijd beschrijft, maar dat u de vragen beantwoordt vanuit hoe u zich normaal voelt, zonder de problemen.

Wilt u omcirkelen wat voor u het best van toepassing is:

1. Gaat u het uit de weg betrokken te raken met mensen tenzij u er zeker van bent dat ze u aardig vinden? Ja / Nee

   Zo ja: wanneer u niet zeker weet of iemand u aardig vindt zet u dan ooit de eerste stap? Ja / Nee

2. Bent u voor het regelen van belangrijke zaken in uw leven zoals financiën, de zorg voor kinderen, het inrichten van uw leven afhankelijk van anderen mensen? Ja / Nee

3. Gelooft u dat u fundamenteel een onvolwaardig persoon bent en voelt u zich vaak niet goed over uzelf? Ja / Nee

4. Blijft u steeds maar denken aan nare dingen die er zijn gebeurd in het verleden of blijft u zich steeds zorgen maken over nare dingen die zouden kunnen gebeuren in de toekomst? Ja / Nee

5. Verwacht u bijna altijd het ergste? Ja / Nee

6. Moet u andere mensen vaak in de gaten houden om te voorkomen dat ze u gebruiken of kwetsen? Ja / Nee

7. Onderschatten mensen vaak uw buitengewone talenten of prestaties? Ja / Nee

8. Heeft u vaak impulsieve dingen gedaan? Ja / Nee
   Bijvoorbeeld:
   Dingen kopen die u echt niet kan veroorloven? Ja / Nee
   Seks met mensen die u nauwelijks kent of onveilige seks? Ja / Nee
   Te veel drinken of drugs gebruiken? Ja / Nee
   Roekeloos auto rijden? Ja / Nee
   Ongecontroleerd eten? Ja / Nee

9. Heeft u geprobeerd uzelf te verwonden of te doden of gedreigd dit te doen? Ja / Nee
   Zo ja, meer dan een keer? Ja / Nee

   Heeft u zichzelf ooit met opzet gesneden, gebrand of gekrast? Ja / Nee

10. Gebeurd het vaak dat u woede uitbarstingen heeft of dat u zo kwaad wordt dat u uw zelfbeheersing verliest? Ja / Nee

APPENDIX IV

DUTCH VERSION OF THE QUICK PERSONALITY ASSESSMENT SCHEDULE (PAS-Q)

Naam:
Datum:

De PAS-Q is een snelle, kortere versie van de Personality Assessment Schedule en kan het best afgenomen worden door mensen die getraind zijn in het afnemen van de volledige PAS. In het onderstaande wordt aangenomen dat deze training al heeft plaats gevonden.

Inleidend/voorbereidende informatie:

Het is het doel van de PAS en de PAS-Q om persoonlijkheidskenmerken die blijvend aanwezig zijn onafhankelijk van welke huidige geestelijke ziekte dan ook op te sporen.
Hoe meer informatie er beschikbaar is over de patient des te minder waarschijnlijk dat deze meting verstoord zal worden door welke huidige geestelijke problemen dan ook. Als er weinig of geen informatie aanwezig is, wordt voorgesteld om de volgende voorbereidende, verdiepende vragen te stellen voor over te gaan op de belangrijkste vragen in het kader van de PAS-Q. De volgende procedure wordt aanbevolen maar kan gewijzigd en veranderd worden door omstandigheden van het interview en met het oog op de geïnterviewde.

Ik zou graag te weten willen komen wat voor soort persoon u was voordat uw huidige problemen begonnen. Kunt u mij in een paar woorden vertellen hoe u uwzelf zoals u toen was zou beschrijven? (antwoord opschrijven)

Ik vraag me af of u nog wat meer over uzelf kan vertellen. Bent u getrouwd of bent u ooit gehuwd geweest? Hebt u kinderen? Waar wonen die op dit moment?
(Bekijk hoe instabiel de relaties waren en of er enige problemen zijn geweest in intieme relaties. Ook bekijken of een persoon enige interesse heeft in het hebben van intieme relaties.)

Bent u momenteel aan het werk, zo niet wanneer had u voor het laatst een baan?
Wat voor een banen heeft u gehad na het voltooien van de opleiding?
Wat waren de omstandigheden toen u uw laatste baan/banen verloor?

Hebt u ooit problemen gehad met politie of justitie? Wat was het probleem? Bent u gearresteerd?

Hebt u ooit problemen gehad met alcohol of drugs?

Hebt u ooit het gevoel gehad dat deze uw leven volledig bepaalde en u er geen controle meer over had?
Gokt u? Is dat ooit een probleem geweest?

Hoe vaak bent u de afgelopen 10 jaar verhuisd?
Wat waren de redenen voor verhuizing?
Bent u ooit dakloos geweest?

Screenende vragen voor de PAS:
In de volledige PAS worden screenende vragen gesteld die leiden tot andere vragen die eventueel op hun beurd leiden tot het scoren op persoonlijkheidskenmerken
In de PAS-Q worden alleen de screenende vragen gesteld. Om te beslissen of een vraag eerlijk beantwoord is houdt rekening met de informatie uit het voorbereidende interview. U moet zich realiseren dat in veel gevallen de screenende vraag zal leiden tot een positief antwoord dat bij verder doorvragen uiteindelijk toch negatief wordt.

Voor alle secties geldt:
Stel alleen de dik gedrukte vragen
Stel alleen de schuingedrukte vragen als de eerste vragen een positief antwoord suggereren.

SECTIE A

WANTROUWIGHEID

Hoe goed kunt u in het algemeen met andere mensen opschieten?
Vertrouwt u ze in het algemeen of bent u op zijn minst wantrouwig t.a.v. hen in het begin?
Hoe lang duurt het in het algemeen voordat u mensen zo goed kent dat u ze vertrouwt?

Bent u geneigd zich zorgen te maken over wat er achter uw rug om gebeurd?
Denkt u ooit dat andere mensen tegen u zijn of u onterecht bekritiseren

(Hebt u veel vrienden?)
(Wordt u ongerust in het geval iemand te weten zou komen wat u aan me verteld hebt?)

GEVOELIGHEID

Bent u lichtgeraakt of gevoelig of moet er veel gebeuren om u overstuur te maken?
Zit het u dwars als andere mensen kritiek op u hebben? Hoe reageert u over het algemeen dan?

Zeggen mensen wel eens tegen u dat u te lichtgeraakt bent?
Hoe lang duurt het voordat u over kritiek heen bent?

(Hebben de vragen die ik gesteld heb u op enige wijze boos of verward gemaakt?)
(Bent u geneigd dingen persoonlijk op te vatten?)
Houdt rekening met relevante antwoorden op vragen over intieme relaties in de vorige sectie "voorbereidende informatie".

Noteer: paranoïde persoonlijkheidsproblemen (1) als deze kenmerken aanwezig zijn maar geen ernstig sociaal disfunctioneren veroorzaken. Noteer een paranoïde persoonlijkheidstoornis (2) als deze ernstige sociaal disfunctioneren veroorzaken (gebruik de PAS richtlijnen)

Groep	Kenmerken	Belangrijkste karakteristieken*	Persoonlijkheidstype vergelijkbaar met de ICD-10	Mate van ernst (0-2)
Teruggetrokken	Wantrouwigheid Gevoeligheid	Licht geraaktheid, weigeren andere mensen te vertrouwen, frequente angst voor samenzweringen, hardnekkig anderen beschuldigen	Paranoidie	

* n.b. deze moeten continue aanwezig zijn en onafhankelijk van de geestelijke toestand van de patiënt ten tijde van het afnemen van de test om gescored te worden

SECTIE B

AFSTANDELIJKHEID

Bent u een persoon die op zichzelf is of wilt u liever meer intieme relaties?
Hebt u ooit echt intieme relaties gehad? Zit het u dwars dat u er niet meer hebt?
(n.b.: als de patiënt een paar intieme relaties heeft gehad maar er des al niet te min verlangt er meer te willen dan moet dit item niet gescored worden.)

Hebt u op enige manier mensen nodig of kunt u zonder hen?

(Zou u het erg vinden om geheel alleen te leven zonder enig contact met andere mensen?)
(Zeggen anderen ooit tegen u dat u zich afzijdig houdt of afstandelijk bent?)

ZONDERLING/EXCENTRICITEIT

Hebt u ongebruikelijke gewoonten of interesses waardoor u anders bent dan anderen?
(n.b.: sommige mensen die deze kenmerken hebben zijn zich niet bewust van het effect op andere mensen, dus de observaties van de onderzoeker t.a.v. de zonderlinge kenmerken zijn bij het scoren van belang.)

Denkt u erg anders te zijn dan andere mensen? Op welke manier?
Hebt u ongebruikelijke gewoonten of interesse? Welke?
Gelooft u in ongebruikelijke zaken zoals gedachtenlezen of controleren?

(Hebben dit soort overtuigingen u in uw leven in problemen gebracht?)
(Directe vragen kunnen gesteld worden naat zonderlinge kenmerken die tijdens het interview opgemerkt worden)
n.b.: zonderling in deze context is duidelijk gescheiden van theatraal, opzichtig gedrag

Houdt rekening met relevante antwoorden op vragen over intieme relaties in de vorige sectie "voorbereidende informatie".

Noteer: schizoïde persoonlijkheidsproblemen (1) als deze kenmerken aanwezig zijn maar geen ernstig sociaal disfunctioneren veroorzaken. Noteer een schizoide persoonlijkheidstoornis (2) als deze ernstige sociaal disfunctioneren veroorzaken (gebruik de PAS richtlijnen)

Groep	Kenmerken	Belangrijkste karakteristieken*	Persoonlijkheidstype vergelijkbaar met de ICD-10	Mate van ernst (0-2)
Teruggetrokken	Afstandelijk Zonderling	Sociaal teruggetrokken, vrijwillig isolatie, weinig of geen intieme relaties, onwetendheid t.a.v regels over sociale omgang	Schizoïd	

* n.b. deze moeten continue aanwezig zijn en onafhankelijk van de geestelijke toestand van de patiënt ten tijde van het afnemen van de test om gescored te worden

SECTIE C

AGRESSIVITEIT

Wordt u snel boos of moet er veel gebeuren om u boos te krijgen?
Hoe reageert u als u boos bent?

Hebt u ooit uw zelfbeheersing compleet verloren?
Bent u zo in het algemeen of alleen in bepaalde omstandigheden (bijv. na veel drank gebruikt te hebben)

(Reageert u ooit met lichamelijk geweld?)
(Bent u ooit in de problemen gekomen met politie en justitie?)

ONGEVOELIGHEID

Trekt u zich gemakkelijk iets aan van gevoelens van andere mensen of kan u deze negeren?
Geeft u om andere mensen?

(Vindt u het moeilijk om met genegenheid en begrip te reageren op gevoelens van andere mensen?)
(Hebt u het als prettig ervaren om andere mensen te kwetsen?)

Houdt rekening met relevante antwoorden op vragen over justitie en politie in de vorige sectie "voorbereidende informatie". Let op dat veel criminele activiteiten niet afhankelijk zijn van een persoonlijkheidsstoornis.

Noteer: dissociale persoonlijkheidsproblemen (1) als deze kenmerken aanwezig zijn maar geen ernstig sociaal disfunctioneren veroorzaken. Noteer een dissociale persoonlijkheidstoornis (2) als deze ernstige sociaal disfunctioneren veroorzaken (gebruik de PAS richtlijnen)

Groep	Kenmerken	Belangrijkste karakteristieken*	Persoonlijkheidstype vergelijkbaar met de ICD-10	Mate van ernst (0-2)
Opzichtig	Agressie Ongevoeligheid	Snel boos, geneigd te reageren met lichamelijk geweld, ongevoeligheid t.a.v. gevoelens van anderen, geen schuldgevoel, buitensporig prikkelbaar	Dissociaal en antisociaal	

* n.b. deze moeten continue aanwezig zijn en onafhankelijk van de geestelijke toestand van de patiënt ten tijde van de test om gescored te worden

SECTIE D

IMPULSIVITEIT

Denkt u altijd goed na voordat u iets doet of reageert u impulsief?
Hebt u ooit impulsief dingen gedaan waarvan u later spijt had?

Bent u ooit in de problemen gekomen omdat u impulsief bent? (zo ja, geef voorbeelden)
Toen u impulsief was heeft dat ooit andere mensen benadeeld?

ONVERANTWOORDELIJKHEID

Doet u ooit dingen zonder na te denken over de gevolgen of bent u altijd voorzichtig in wat u doet?
Zou u uzelf beschrijven als een verantwoordelijk of als een onverantwoordelijk persoon?

Raakt u ooit in ernstige moeilijkheden door onverantwoordelijkheden (bijv. in schulden raken, criminele activiteiten, seksuele problemen)
Hoe heeft uw onverantwoordelijkheid uw leven beïnvloed? (geef voorbeelden)

Houdt rekening met relevante antwoorden op vragen over verandering van baan en verhuizen in de vorige sectie "voorbereidende informatie".

Deze vragen hebben betrekking op zowel de borderline al de impulsieve persoonlijkheidsstoornissen (emotioneel onstabiele persoonlijkheidsstoornis). Bij beiden is de impulsiviteit een belangrijke kenmerk maar bij de borderline persoonlijkheidsstoornis is er onduidelijkheid t.a.v de identiteit met instabiele relaties, stemmingswisselingen met het dreigen of daadwerkelijk zichzelf beschadigen.

Noteer: impulsieve persoonlijkheidsproblemen (1) als deze kenmerken aanwezig zijn maar geen ernstig sociaal disfunctioneren veroorzaken. Noteer een impulsieve persoonlijkheidstoornis (2) als deze ernstige sociaal disfunctioneren veroorzaken (gebruik de PAS richtlijnen)

Noteer: borderline persoonlijkheidsproblemen (1) als deze kenmerken aanwezig zijn maar geen ernstig sociaal disfunctioneren veroorzaken. Noteer een borderline persoonlijkheidstoornis (2) als deze ernstige sociaal disfunctioneren veroorzaken. (gebruik de PAS richtlijnen)

Groep	Kenmerken	Belangrijkste karakteristieken*	Persoonlijkheidstype vergelijkbaar met de ICD-10	Mate van ernst (0-2)
Opzichtig	Impulsiviteit Onverantwoordelijkheid	Geneigd om impulsief te reageren met spijt achteraf i.v.m. de negatieve consequenties	Impulsief Borderline	
		Falen om vooraf zaken te plannen of om consequent te anticiperen op de gevolgen het eigen gedrag		
		Niet in staat tot intieme relaties in stand houden, welke vaak intens zijn, onduidelijk zelfbeeld		

* n.b. deze moeten continue aanwezig zijn en onafhankelijk van de geestelijke toestand van de patiënt ten tijde van de test om gescored te worden

SECTIE E

KINDERACHTIGHEID

Gedraagt u zichzelf wel eens kinderachtig of zou u uzelf als tamelijk volwassen beschouwen?

Manipuleert u wel eens mensen om uw zin te krijgen?
Staat u graag in het middelpunt van de aandacht?
Hebt u ooit egoïstisch gehandeld,waarbij u alleen maar aan uzelf dacht?
(Heeft dat tot problemen geleid?)

INSTABILITEIT

Veranderd uw gemoedstoestand van dag tot dag of van week tot week of blijft deze min of meer hetzelfde?

Houdt rekening met relevante antwoorden op de vragen over gewoonten en intieme relaties in de vorige sectie "voorbereidende informatie".

Noteer: Theatrale persoonlijkheidsproblemen (1) als deze kenmerken aanwezig zijn maar geen ernstig sociaal disfunctioneren veroorzaken. Noteer een Theatrale persoonlijkheidstoornis (2) als deze ernstige sociaal disfunctioneren veroorzaken (gebruik de PAS richtlijnen)

Groep	Kenmerken	Belangrijkste karakteristieken*	Persoonlijkheidstype vergelijkbaar met de ICD-10	Mate van ernst (0-2)
Opzichtig	Kinderachtigheid Instabiliteit	Egocentrisch, neiging tot dramatiseren en manipulatief gedrag, oppervlakkig en labiel in gevoelens, gemakkelijk beïnvloedbaar door anderen	Theatraal	

* n.b. deze moeten continue aanwezig zijn en onafhankelijk van de geestelijke toestand van de patiënt ten tijde van de test om gescored te worden

SECTIE F

NAUWGEZETHEID

Bent u normaliter een pietlut of een zorgeloos persoon?
Plant u alles tot in detail of plant u zelden iets in het leven?

Zeggen mensen ooit dat u te netje of nauwgezet bent of zelfs een perfectionist?
Wenst u dat u minder nauwgezet zou zijn?
Bent u iemand die hoge eisen aan zichzelf stelt?
Leidt de nauwgezetheid ooit tot problemen in uw leven? (specificeer)

(Hebt u zich zorgen gemaakt dat u vandaag te laat zou zijn?)
(Als ik te laat was geweest zou dat uw gebruikelijk manier van doen verstoord hebben?)
(Denkt u dat u harder werkt dan de gemiddelde persoon?)

RIGIDITEIT

Vindt u het moeilijk om u aan te passen aan nieuwe situaties of bent u een persoon die zich gemakkelijk kan aanpassen?
Raakt u overstuur als uw plannen om welke reden dan ook veranderd worden?

Kunt u zich aanpassen aan anderen die zich anders gedragen of voelen dan uzelf? (bijv op het werk, met familie)
Moet u altijd uw zin krijgen?

Houdt rekening met relevante antwoorden op de vragen over arbeidsverleden in de vorige sectie "voorbereidende informatie".

Noteer: obsessieve persoonlijkheidsproblemen (1) als deze kenmerken aanwezig zijn maar geen ernstig sociaal disfunctioneren veroorzaken. Noteer een obsessieve persoonlijkheidstoornis (2) als deze ernstige sociaal disfunctioneren veroorzaken (gebruik de PAS richtlijnen)

Groep	Kenmerken	Belangrijkste karakteristieken*	Persoonlijkheidstype vergelijkbaar met de ICD-10	Mate van ernst (0-2)
Angstig	Nauwgezetheid Rigiditeit	Te overdreven nauwgezet in alledaagse activiteiten, neiging alles in detail te plannen, niet in staat een plan aan te passen aan veranderende behoeften, buitensporig koppig	Anankastisch (Obsessief -compulsief)	

* n.b. deze moeten continue aanwezig zijn en onafhankelijk van de geestelijke toestand van de patiënt ten tijde van de test om gescored te worden

SECTIE G

ANGSTIGHEID

Bent u normaliter een angstig of een kalm persoon?
Bent u minder nerveus, ongeveer hetzelfde, of meer nerveus dan de meeste mensen?

Maakt u zich ooit zorgen over dingen waar de meeste mensenzich niet mee bezig houden?(geef voorbeelden)
Laat u uw nervositeit aan andere mensen merken of verbergt u het?
Bent u altijd een angstig persoon geweest?

(Maakt u zich wel eens zorgen over iets of iemand het merendeel van uw tijd?)
(Heeft uw angst ooit tot problemen geleid?)
(specificeer)

VERLEGENHEID

Bent u normaliter een verlegen persoon of voelt u zich vertrouwd in gezelschap van andere mensen?
Komt u zelfvertrouwen te kort?

Leert u mensen snel kennen of is er een lange tijd nodig voordat u zich bij hen op uw gemak voelt?
Wijkt u ooit van uw voornemens om andere mensen te vermijden omdat u verlegen bent?
Hebt u moeite om vrienden te maken omdat u verlegen bent?
Zou u zich graag meer op uw gemak willen voelen bij andere mensen? Heeft verlegenheid problemen voor u veroorzaakt?

(Voelt u zich zelfs in de aanwezigheid van vrienden niet op uw gemak?)
(Voelt u zich nu verlegen of niet op uw gemak?)

Houdt rekening met relevante antwoorden op de vragen over persoonlijke relaties in de vorige sectie "voorbereidende informatie". Angstige persoonlijkheden passen hun levensstijl aan om angst te vermijden

Noteer: angstige persoonlijkheidsproblemen (1) als deze kenmerken aanwezig zijn maar geen ernstig sociaal disfunctioneren veroorzaken. Noteer een angstige persoonlijkheidstoornis (2) als deze ernstig sociaal disfunctioneren veroorzaken (gebruik de PAS richtlijnen)

Groep	Kenmerken	Belangrijkste karakteristieken*	Persoonlijkheidstype vergelijkbaar met de ICD-10	Mate van ernst (0-2)
Angstig	Angstigheid Verlegenheid	Te overdreven nauwgezet in alledaagse activiteiten, neiging alles in detail te plannen, niet in staat een plan aan te passen aan veranderende behoeften, buitensporig koppig	Angstig	

* n.b. deze moeten continue aanwezig zijn en onafhankelijk van de geestelijke toestand van de patiënt ten tijde van de test om gescored te worden

SECTIE H

HULPELOOSHEID

Wanneer u geconfronteerd wordt met een uitdaging, reageert u hier meestal goed op of laat u deze voorbij gaan?
Bent u iemand die normaliter problemen in het leven alleen oplost of hebt u hulp van andere mensen nodig?

Hoe bent u met belangrijke problemen in het verleden omgegaan? (geef voorbeelden)

(Wanneer was het de laatste keer dat u een ernstig probleem in uw eentje probeerde op te lossen?)

KWETSBAARHEID

Vindt u dat wanneer er dingen in uw leven misgaan (bijv. ontslag op het werk, sterfgeval in de familie) u in hoge mate verward bent of gaat u er goed mee om?
Duurt het gewoonlijk een korte of een lange tijd dat na een crisis alles in uw leven weer normaal is?

(hoe denkt u dat u met een crisis zou om gaan zoals een stefgeval in uw familie, auto-ongeluk of verlies van uw baan?)

Houdt rekening met relevante antwoorden op de vragen over drugs, alcohol gebruik en intieme relaties in de vorige sectie "voorbereidende informatie".

Noteer: afhankelijke persoonlijkheidsproblemen (1) als deze kenmerken aanwezig zijn maar geen ernstig sociaal disfunctioneren veroorzaken. Noteer een afhankelijke persoonlijkheidstoornis (2) als deze ernstige sociaal disfunctioneren veroorzaken (gebruik de PAS richtlijnen)

Groep	Kenmerken	Belangrijkste karakteristieken*	Persoonlijkheidstype vergelijkbaar met de ICD-10	Mate van ernst (0-2)
Angstig	Hulpeloosheid Kwetsbaarheid	Onmogelijkheid om te functioneren zonder hulp van anderen, moeilijkheden bij het aanpassen in het geval van negatieve gebeurtenissen, overmatig afhankelijkheid en onderdanigheid t.o.v. anderen	Afhankelijk	

* n.b. deze moeten continue aanwezig zijn en onafhankelijk van de geestelijke toestand van de patiënt ten tijde van de test om gescored te worden

TOTALE SCORE:

Score van de ernst (over alle secties heen):

Mate van ernst 0 voor alle beoordelingen - score 0 (geen persoonlijkheidsproblemen); Voor een score van 1 van een of meer beoordelingen – score totaal 1 (persoonlijkheidsproblemen); Voor een score van 2 voor een persoonlijkheidsstoornis in slechts 1 cluster (schizoïd, paranoïd (cluster A), impulsief, borderline, theatraal, antisociaal (cluster B), afhankelijk obsessief compulsief, angstig (cluster C) score dan een 2; voor een score van 2 bij meer dan 1 cluster geef dan een score 3.

APPENDIX V

DUTCH VERSION OF THE STANDARDISED ASSESSMENT OF PERSONALITY ICD-10 & DSM IV (SAP)

Naam:
Datum:

GEBRUIK VAN DE SAP

De SAP (Standardised Assessment of Personality) is een instrument om de aanwezigheid van een persoonlijkheidsstoornis en het type van een persoonlijkheidsstoornis vast te stellen, m.b.v. een kort semi-gestructureerd interview, met een belangrijke bekende van de patiënt (informant).
De vragen zijn toegesneden op de ICD-10- en de DSM IV- criteria voor de diagnose van een persoonlijkheidsstoornis.
De belangrijke bekende (informant) moet idealiter de patiënt minstens vijf jaar voor hij of zij zijn of haar psychiatrische aandoening kreeg kennen en moet bekend zijn met zijn gedrag in verschillende situaties. Als de patiënt perioden heeft doorgemaakt van een psychiatrische aandoening dan moet het voor de bekende duidelijk zijn dat de interviewer geïnteresseerd is in de persoonlijkheidskenmerken van de patiënt voordat de ziekte begon of in de periode dat de patiënt vrij was van symptomen van de psychiatrische ziekte.

Ongestructureerde deel van het interview

De interviewer vraagt de bekende (informant) om de patiënt te beschrijven. De precieze bewoording kan men vinden op pagina 4. Aanmoedigingen kunnen gegegeven worden en alle relevante termen die omcirkeld dienen te worden kan men vinden op pagina 5.

Gerichte vragen

Daarna moeten de dertien vragen op pagina 4 letterlijk gesteld worden worden en ze mogen herhaald worden, maar er mag geen verdere uitleg gegeven worden totdat ze allemaal gesteld zijn. Ook hierbij geldt dat elke relevante term moet worden omcirceld in de lijst op pagina 5. In deze fase van het interview is het belangrijk om flexibel te zijn t.a.v. het gebruik van synoniemen.

Vragen gerelateerd aan de specifieke categorieën

Als er geen relevante term wordt genoemd door de bekende wordt het interview beëindigd. Als er één of meer termen omcirkeld zijn, moeten alle vragen van die specifieke categorie of categorieën van pagina 6-12 gesteld worden.

Sommige termen komen binnen meer dan één categorie voor, bijvoorbeeld "wantrouwig", welke voorkomt zowel binnen de categorie paranoïdie als schizotypisch. Als dit gebeurt dan is het belangrijk dat de interviewer beide categorieën persoonlijkheidsstoornissen nader onderzoekt.

Elke vraag moet slechts positief gescoord worden als de bekende een duidelijk "ja" als antwoord geeft op de betreffende vraag. In sommige gevallen is er sprake van een positieve score in het geval van en bevestigend antwoord op één van de twee samenhangende vragen (bijvoorbeeld zie binnen de categorie schizoïd A6 en A7).

Handicap

Voor alle categorieën geldt dat als er drie of meer vragen als positief gescoord worden, het nodig is om een mate van handicap te bepalen. Dit kan gedaan worden door de informant alle volgende vragen te stellen:

1. Zou u kunnen zeggen dat deze groep van trekken *(de positief gescoorde kenmerken van de relevante categorie worden voorgelezen aan de bekende)* de oorzaak zijn van aanzienlijk persoonlijk ongemak (voor de patiënt)?
2. Zou u zeggen dat deze groep van trekken grote problemen hebben gegeven (voor de patiënt) in zijn of haar werk?
3. Zou u zeggen dat deze groep trekken grote problemen hebben gegeven (voor de patiënt) in zijn of haar sociale leven?

Scoren: samenvattingtabel

Aan het einde van elke categorie is een samenvattende tabel toegevoegd, zodat de informatie op het scoringsformulier (pagina 13) gemakkelijk kan worden ingevuld.
Beschrijvingen van elke categorie zijn ingedeeld in A, B, C of D volgens ICD-10 en de DSM-IV.
Beschrijvingen van A en D staan voor zowel de ICD-10 als de DSM IV (met uitzondering van de schizotypische en de narcistische categorieën welke alleen bestaan in de DSM-IV). Sommige ICD-beschrijvingen moeten positief gescoord worden als één van de twee DSM-beschrijvingen positief is (bijv. in het geval van schizoïd A6 en A7 geeft bevestiging van A6 of A7 een positief resultaat voor de ICD-10, terwijl voor DSM het twee aparte vragen zijn).
Beschrijvingen in B zijn ICD-specifiek en de beschrijvingen in C DSM-specifiek.

"Totale ICD" is het totaal van positieve beschrijvingen volgens de ICD. In de meeste van de categorieën verwijst dit naar de som van A en B. De totale score van de DSM is het totaal van DSM. Vink de groepen van Persoonlijk leed, Beroepsmatige verslechtering en Sociale verslechtering aan als deze handicap aangeven.

In de dissociale categorie: Beschrijving van een gedragsstoornis moet alleen gevraagd worden wanneer de DSM voldoet en wanneer er op zijn minst 3 positieve criteria in het totaal van A+C zijn.

Met betrekking tot de categorie emotionele instabiliteit (borderline) staan A+ B voor de ICD-impulsieve stoornis, A+B+D voor de ICD-borderline persoonlijkheidsstoornis, terwijl A+C+D betrekking hebben op de DSM-borderline persoonlijkheidsstoornis. B2 is een noodzakelijk criterium voor de ICD-impulsieve stoornis. Vink B2 aan in de samenvattingtabel als deze aanwezig is.
Om een ICD-borderline vast te stellen zijn tenminste drie positieve scores van de ICD-impulsief (A+B) en twee van de borderline-ICD (D) nodig. De DSM kent alleen de borderline persoonlijkheidsstoornis en geen subcategorieën zoals de ICD. Voor de DSM diagnose borderline moet gebruikt gemaakt worden van het totaal van A+C+D.

Scoren: scoringsformulier

Er zijn twee verschillende manieren om de SAP te analyseren. De ene is de dimensionele benadering, die het totaal aantal positieve beschrijvingen als een continue variabele beschouwt. Een ander is de categorale benadering, die de aanwezigheid van handicap vereist (d.w.z. of persoonlijk leed, of beroepsmatige verslechtering of sociale verslechtering) en een minimaal aantal positieve beschrijvingen. Het scoringsformulier kan voor beide benaderingen gebruikt worden.

Vul "totaal" overeenstemmend met samenvattingtabellen in. Vink "handicap" aan als er persoonlijk leed, beroepsmatige verslechtering of sociale verslechtering aanwezig is. Vergelijk totale score met de daarbij behorende score van de verschillende diagnostische systemen. CDDG verwijst naar de ICD-10 klinische beschrijving en diagnostische richtlijn. De DCR verwijst naar de ICD-10 diagnostische criteria voor onderzoek.

Als het totaal groter of gelijk is aan de drempel en er sprake is van handicap dan kan de diagnose persoonlijkheidsstoornis gesteld worden. De aanwezigheid van een gedragsstoornis noodzakelijk voor de DSM antisociale persoonlijkheidsstoornis. ICD vereist B2 voor een impulsieve stoornis. Voor de ICD borderline persoonlijkheidsstoornis zijn er minstens drie positieve scores van de impulsieve (A+B) en twee van de borderline (D) criteria vereist.

Datum:

Naam van de patiënt:

Naam van de bekende:

Aard van de relatie:

Lengte van relatie:

Frequentie van contact:

"Ik ben geïnteresseerd in wat voor soort persoon (de naam van de patiënt) is. Mensen vinden, als ze ziek zijn, het vaak moeilijk zichzelf te beschrijven zoals ze normaal zijn. Hoe zou u hem of haar beschrijven in normale doen, voor dat hij of zij ziek werd of gedurende de laatste periode dat hij of zij zich goed voelde."
(noteer antwoord)

De volgende vragen moeten letterlijk gesteld worden zonder verdere uitleg totdat ze allen gesteld zijn:

1. Is hij/zij in staat tot het sluiten en in stand houden van vriendschappen?

2. Zou u hem/haar beschrijven als een eenling?

3. Vertrouwt hij/zij andere mensen?

4. Hoe is zijn/haar stemming?

5. Is hij/zij snel ongerust of is zich erg van zichzelf bewust?

6. Hoe erg steunt hij/zij op anderen?

7. Hoe reageert hij/zij op kritiek?

8. Is hij/zij te emotioneel of te dramatisch?

9. Is hij/zij een perfectionist?

10. Is hij/zij impulsief?

11. Is hij/zij agressief of onverantwoordelijk?

12. Heeft hij/zij vreemde ideeën of vreemde gewoonten?

13. Heeft hij/zij altijd een te hoge dunk van zichof haarzelf?

Zijn er nog andere aan- of opmerkingen die u zou willen toevoegen?

Stop het interview als er geen relevante trekken naar voren komen (geen termen omcirkeld).

De volgende sleutelwoorden (op de volgende pagina) zouden ter sprake gekomen kunnen zijn

Omcirkelen a.u.b. (De exacte bewoordingen hoeven niet gebruikt te zijn door de bekende en een gelijkwaardige beschrijving of welk synoniem dan ook dienen ,ook te leiden tot de omcirkeling van een term.)

Paranoïd (blz. 5)
Wantrouwig (schizotypisch)
Gemakkelijk te kleineren
Vasthoudend rancuneus
Zichzelf erg belangrijk vinden (narcistisch)
Twistziek (impulsief)
Anderen op negatieve wijze misinterpreteren

Schizotypisch (blz. 6)
Excentriek (schizoïd)
Vreemde spraak of ideeën
Bijgelovig
Niet gepaste spraak/gedrag/verschijning
Wantrouwig (paranoïd)
Weinig goede vrienden

Impulsief/borderline (blz. 8)
Impulsief (antisociaal)
Woede-aanvallen
Onstabiele relaties
Wisselende stemmingen
Twistziek (paranoïd)
Dreiging of daadwerkelijk zelfbeschadigen

Narcistisch (blz. 9)
Zichzelf erg belangrijk vinden (paranoïd)
Manipulatief
Opschepperig
Jaloers
Geen empathie
Arrogant

Schizoïd (blz. 6)
Eenling
Koud
Afstandelijk
Excentriek (schizotypisch)
Niet emotioneel
Onverschillig t.a.v. complimenten/ kritiek

Dissociaal/Antisociaal (blz. 7)
Onverantwoordelijk
Agressief
Geen schuldgevoel
Hardleers
Problemen met politie en justitie
Impulsief (impulsief)

Theatraal (blz. 9)
Dramatisch
Suggestiebel
Te emotioneel
Hunkeren naar opwinding
Hunkeren naar aandacht
Seksueel uitlokkend

Anakastisch/Obsessief compulsief (blz. 10)
Perfectionist
Te streng geweten
Koppig
Erg traditioneel/ conventioneel
Werkverslaafd
Gierig, pinnig

Angstig/Ontwijkend (blz. 10)
Piekert gemakkelijk
Zich niet kunnen ontspannen
Sociaal angstig
Verlegen, timide
Gevoelig voor afwijzing
Onzeker

Afhankelijk (blz. 11)
Op andere steunen
Te volgzaam
Helemaal geen eisen durven stellen
Hulpeloos wanneer hij/zij alleen is
Geen initiatief
Geen zelfvertrouwen

Als er een sleutelwoord omcirkeld is ga dan naar de volgende sectie en vraag alle vragen van de relevante groepen uit en vink deze aan als men eraan voldoet.

N.B. De interviewer moet controleren of de kenmerken hierboven genoemd langdurig aanwezig zijn en in verschillende levensgebieden van de patiënt. Als er meer dan drie criteria van elke categorie aangevinkt zijn dan moet er bepaald worden of de verzameling van trekken:

1) aanzienlijk persoonlijk leed veroorzaken
2) beroepsmatige verslechtering veroorzaken
3) sociale verslechtering veroorzaken

PARANOÏD

Is hij/zij of Heeft hij/zij of Wordt hij/zij…		**ICD**	**DSM**
A.	1. vasthoudend rancuneus	☐	
	2. een wantrouwig persoon die acties van anderen foutief als dreiging of vernedering interpreteert		☐
	3. iemand die twijfelt aan de trouw van zijn of haar partner zonder gerechtvaardigde reden		☐
	4. vaak volledig in beslag genomen door het idee dat mensen tegen hem of haar samenzweren zonder goede reden		☐
B.	1. erg gevoelig voor tegenslagen en afwijzingen		☐
	2. erg sterk idee over zijn of haar rechten zonder daarbij de actuele situatie inogenschouw te nemen		☐
	3. het gevoel erg belangrijk te zijn en denkt hij of zij dat andere mensen speciaal in hem of haar geïnteresseerd zijn	☐	
C.	1. twijfels over de loyaliteit van anderen		☐
	2. erg terughoudend om anderen te vertrouwen *(controleer: in geval dat de informatie tegen hem of haar gebruikt zou kunnen worden)*		☐
	3. gemakkelijk beledigd en reageert hij of zij daarop snel met boosheid of een tegenaanval		☐

Totaal ICD (A+B)	Totaal DSM (A+C)	Persoonlijk leed	Beroepsmatige verslechtering	Sociale verslechtering

SCHIZOÏD

Is hij/zij of Laat hij/zij of Heeft hij/zij…		**ICD**	**DSM**
A.	1. het soort mens dat vindt dat weinig of geen activiteiten voor hem/haar plezierig zijn		☐
	2. een afstandelijk, afzijdig of koud persoon		☐
	3. weinig interesse in lof of kritiek van anderen	☐	
	4. weinig interesse in seksualiteit met anderen		☐
	5. bijna altijd de voorkeur om dingen alleen te doen		☐
	6. moeite met het genieten van intieme relaties of wil hij/zij geen intieme relaties	☐	☐
	7. maar een paar goede vrienden (buiten zijn familie) **)of**	☐	☐
B.	1. moeite met het tonen van warme gevoelens of boosheid richting anderen	☐	
	2. een persoon die in zijn of haar fantasiewereld leeft	☐	
	3. zich niet bewust van de huidige sociale normen en gewoonten (in andere woorden "wat normaal is")	☐	

Totaal ICD (A+B)	Totaal DSM (A)	Persoonlijk leed	Beroepsmatige verslechtering	Sociale verslechtering

SCHIZOTYPISCH

Heeft hij/zij of Is hij/zij of Laat zij/hij of Maakt hij/zij…		**ICD**	**DSM**
A.	1. ten onrechte de gedachte dat mensen of gebeurtenissen op hem of haar betrekking hebben		☐
	2. meerdere rare ideeën (zoals bijvoorbeeld het geloven in helderziendheid of telepathie, enz.)		☐
	3. ongebruikelijk ervaringen (bijv. illusies, de aanwezigheid van een overleden persoon voelen)		☐
	4. een rare manier van spreken (bijvoorbeeld erg vaag of erg uitwijdend of met erg weinig woorden)		☐
	5. een wantrouwig persoon die denkt dat anderen tegen hem of haar zijn		☐
	6. emoties zien die niet op zijn plaats of ongepast zijn		☐

7. een vreemd of excentriek uitziend gedrag of verschijning ☐
8. alleen een paar goede vrienden (buiten de familie) ☐
9. erg sociaal angstig ☐

Totaal DSM (A)	Persoonlijk leed	Beroepsmatige verslechtering	Sociale verslechtering

DISSOCIAAL (ANTISOCIAAL)

	Is hij/zij of Heeft hij/zij of Raakt hij/zij of Geeft hij/zij…		**ICD**	**DSM**
A.	1. volhardend in het geen acht slaan op sociale regels en de wet			☐
	2. voortdurend onverantwoordelijk bezig	**of)**	☐	☐
	3. geen gevoelens van spijt als hij of zij iets fout heeft gedaan		☐	
	4. gemakkelijk gefrustreerd of geïrriteerd, leidend bij hem of haar tot agressie of een gevecht		☐	
B.	1. in staat relaties te beginnen, maar niet in staat deze lang stand te laten houden		☐	
	2. niet in staat schuldgevoels te hebben of te leren van ervaringen uit het verleden		☐	
	3. vaak anderen de schuld en praat eigen onverantwoordelijke gedrag goed		☐	
C.	1. een persoon die herhaaldelijk liegt en gebruik maakt van valse namen of anderen oplicht voor persoonlijk voordeel of plezier			☐
	2. een impulsief persoon die niet vooraf zaken plant			☐
	3. roekeloos t.a.v. eigen en andermans veiligheid			☐
	4. een gedragsstoornis (zie beneden)			☐

GEDRAGSSTOORNIS

(onderzoek dit alleen: 1. om een DSM diagnose vast te stellen, 2.als A+C groter of gelijk aan drie is)

Welke drie dan ook van de volgende criteria voor het 15de levensjaar (tenzij anders aangegeven)

Is hij/zij of Doet hij /zij…

1. vaak intimideren
2. vaak liegen
3. vaak een lichamelijk gevecht beginnen
4. gebruik van een wapen *(checken: in meer dan één gevecht)*
5. op zijn minst één maal stelen zonder de confrontatie van het slachtoffer
6. lichamelijk wreed ten aanzien van andere mensen
7. lichamelijk wreed ten aanzien van dieren
8. stelen met de confrontatie met het slachtoffer (bijv. beroving)
9. expres andermans eigendommen kapot maken *(check: m.u.v. brandstichting)*
10. inbreken in iemands huis of auto
11. langer dan één dag weglopen van huis *(check: op zijn minst twee keer of één keer zonder terugkeren)*
12. iemand dwingen tot het hebben van seks met hem of haar
13. expres brandstichten
14. vaak 's nachts wegblijven *(check: ondanks een ouderlijk verbod voor het 13de jaar)*
15. vaak spijbelen *(check: voor het 13de jaar)*

Totaal ICD (A+B)	Totaal DSM (A+C)	Gedragsstoornis	Persoonlijk leed	Beroepsmatige verslechtering	Sociale verslechtering

EMOTIONEEL ONSTABIEL (BORDERLINE)

Is hij/zij of Heeft hij/zij of Reageert zij/hij…		**ICD**	**DSM**
A.	1. uitbarstingen van intensieve boosheid of geweld die hij/zij moeilijk onder controle te houden vindt	☐	
	2. wisselende stemmingen	☐	
B.	1. erg vaak op onverwachtse wijze zonder met de consequenties rekening te houden	☐	
	2. vaak ruziezoekend, vooral als zijn of haar impulsieve gedrag bekritiseerd wordt	☐	
	3. moeite met het doen van dingen die niet onmiddellijk bevrediging opleveren	☐	
C.	1. impulsief op minstens twee gebieden die mogelijkerwijs voor beschadiging van zich of haarzelf kunnen leiden (niet suïcidaal gedrag)		☐
	2. erg wantrouwig ten aanzien van anderen als hij of zij onder spanning staat		☐
D.	1. onduidelijk over zijn/haar doelen, zelfbeeld en seksuele voorkeur	☐	
	2. instabiele en intensieve persoonlijke relaties waarbij de ander	☐	
	wisselend op een voetstuk wordt gezet (idealiseren) dan weer wordt verketterd (gedevalueerd)	☐	
	3. verwoede pogingen om echte of ingebeelde verlatingen te vermijden	☐	
	4. meerdere malen suïcidale dreigingen geuit, pogingen gedaan, of zich	☐	
	bezig houden met automutilerend gedrag	☐	
	5. het soort persoon dat over gevoelens van voortdurend leeg zijn en verveling klaagt	☐	

Totaal ICD impulsief (A+B)	B2	Totaal ICD Borderline (A+B)	(D)	Totaal DSM (A+C+D)	Persoonlijk leed	Beroepsmatige verslechtering	Sociale verslechtering

THEATRAAL

Doet hij/zij of Is hij/zij of Voelt hij/zij of Heeft hij/zij…		**ICD**	**DSM**
A.	1. dramatisch, theatraal of laat hij of zij overdreven emoties zien	☐	
	2. gemakkelijk te beïnvloeden door anderen	☐	
	3. emoties die snel veranderbaar zijn	☐	
	4. zich onprettig in situaties waar hij of zij niet in het middelpunt van de belangstelling staat	☐	
	5. het soort persoon dat zich misplaatst seksueel verleidend gedraagt of kleedt	☐	
B.	1. bovenmatig bezig met fysieke aantrekkingskracht	☐	
C.	1. het soort persoon dat zijn of haar uiterlijk continu gebruikt om aandacht te trekken		☐
	2. een manier van spreken dat weinig details bevat en erg overdreven aan doet		☐
	3. dat relaties intiemer zijn dan dat ze in werkelijkheid zijn		☐

Totaal ICD (A+B)	Totaal DSM (A+C)	Persoonlijk leed	Beroepsmatige verslechtering	Sociale verslechtering

NARCISTISCH

Wordt hij/zij of Gelooft hij/zij of Denkt hij/zij of Heeft hij/zij…		**ICD**	**DSM**
A.	1. dat hij of zij buitengewoon belangrijk is		☐
	2. volledig in beslag genomen worden door fantasieën over onbegrensd succes, macht, intelligentie, schoonheid of de ideale liefde		☐
	3. dat zijn/haar problemen uniek zijn en alleen begrepen kunnen worden door andere speciale mensen		☐
	4. buitensporig veel bewondering nodig		☐
	5. volkomen onredelijk, recht te hebben op speciale gunsten van anderen		☐
	6. anderen uitgebuit voor eigen doeleinden		☐
	7. niet in staat om gevoelens van andere mensen te herkennen		☐
	8. volledig in beslag genomen door gevoelens van afgunst		
	9. arrogant in gedrag of houding		☐

Totaal DSM (A)	Persoonlijk leed	Beroepsmatige verslechtering	Sociale verslechtering

ANANKASTISCH (OBSESSIEF-COMPULSIEF)

Is hij/zij of Wordt hij/zij of Staat hij/zij…		**ICD**	**DSM**
A.	1. een persoon die heel erg plichtsgetrouw is en altijd zorgt dat hij of zij dingen precies goed doet **)**	☐	
	2. een erge betweter, die zich strak aan de sociale regels houdt	☐	**) of** ☐
	3. zo in beslag genomen door details en regels dat de hoofdzaak van de activiteit uit het oog verloren wordt		☐
	4. zo'n perfectionist dat de kans bestaat dat werk niet afgemaakt wordt		☐
	5. bovenmatig toegewijd aan het werk zodat dit volledig ten koste gaat van ontspannende activiteiten en vriendschappen		☐
	6. koppig en rigide		☐
	7. er op dat anderen dingen doen op de manier waarop hij of zij wil dat ze gedaan worden		☐
B.	1. te voorzichtig met gevoelens van grote twijfel	☐	
C.	1. niet is staat kapotte of waardeloze zaken weg te doen, zelfs al hebben ze geen emotionele waarde		☐
	2. de neiging hebben om geld op te potten (gierig, pinnig)		☐

Totaal ICD (A+B)	Totaal DSM (A+C)	Persoonlijk leed	Beroepsmatige verslechtering	Sociale verslechtering

ANGSTIG/ONTWIJKEND

Is hij/zij of Heeft hij/zij of Maakt hij/zij…		**ICD**	**DSM**
A.	1. het soort persoon die zichzelf als onaantrekkelijk of minderwaardig ziet		☐
	2. zich buitengewoon veel zorgen over kritiek of met de nek aangekeken te worden (afgewezen) in een sociale situatie		☐
	3. niet graag met andere mensen te maken krijgen tenzij hij/zij er zeker van is aardig gevonden te worden		☐
	4. het soort persoon die activiteiten ontwijkt die met zich mee brengen dat men met andere mensen contact heeft		☐
(check: vanwege vrees om bekritiseerd of afgewezen te worden)			
B.	1. altijd gespannen en bezorgd	☐	
	2. duidelijkheid en veiligheid nodig, waardoor zijn of haar levensstijl beperkt wordt	☐	

C. 1. terughoudend in een intieme relaties uit angst zichzelf voor gek te zetten ☐
2. terughoudend in relaties vanuit het gevoel te kort te schieten ☐
3. onwillig om mee te doen aan nieuwe activiteiten die wel eens hem of haar in verlegenheid zouden kunnen brengen ☐

Totaal ICD-10 (A+B)	Totaal DSM (A+C)	Persoonlijk leed	Beroepsmatige verslechtering	Sociale verslechtering

AFHANKELIJK

Is hij/zij of Heeft hij/zij of Moet hij/zij… **ICD** **DSM**

A. 1. het soort persoon dat toelaat dat anderen de meeste van de voor hem of haar belangrijke beslissingen nemen ☐
2. het soort persoon dat zich ongemakkelijk voelt of hulpeloos is wanneer hij of zij alleen is ☐

(check: omdat hij of zij het gevoel heeft niet goed op zichzelf te kunnen passen)

3. overbezorgd met angsten om in de steek gelaten te worden of om er alleen voor te komen staan ☐
4. niet in staat om alledaagse beslissingen te nemen zonder zich eerst buitensporig te laten adviseren of gerust te stellen door anderen ☐

B. 1. het soort persoon dat de behoeften en wensen van degene waar hij of zij afhankelijk van is, voor de eigen behoeften en wensen plaatst ☐
2. onwillig om zelfs redelijke eisen te stellen aan degene van wie hij of zij afhankelijk is ☐

C. 1. moeite om te laten zien het ergens niet mee eens te zijn uit angst om afgewezen te worden ☐
2. moeite om iets nieuws te beginnen of dingen alleen te doen ☐
3. het soort persoon dat zich vrijwillig meldt voor het doen van dingen die onplezierig zijn of beneden zijn of haar waardigheid zijn, ten einde door andere mensen aardig gevonden te worden ☐
4. snel opzoek naar een nieuwe relatie voor zorging en ondersteuning wanneer een eerdere relatie stopt ☐

Totaal ICD-10 (A+B)	Totaal DSM (A+C)	Persoonlijk leed	Beroepsmatige verslechtering	Sociale verslechtering

Scoringsformulier (zie voor de gebruiksaanwijzing pagina 197)

	Totaal		Last			Vergelijken met			diagnose		
	ICD	DSM	Pers.	beroeps	sociaal	CDDG	DCR	DSMIV	CDDG	DCR	DSM
Paranoid						3	4	4			
Schizoid						3	4	4			
Schizotypisch	***X***					***X***	***X***	5	***X***	***X***	
Disociaal/antisociaal						3	3	3			
Impulsief		***X***				3	3	***X***			***X***
Borderline						3+2	3+2	5			
Theatraal						3	4	5			
Narcistisch	***X***					***X***	***X***	5	***X***	***X***	
Anankastisch (obsessief compulsief)						3	4	4			
Angstig (ontwijkend)						3	4	4			
Afhankelijk						3	4	5			

CDDG: ICD-10 klinische beschrijvingen en diagnostische richtlijnen
DCR: ICD-10 diagnostische criteria voor onderzoek
DSM IV diagnose antisociale persoonlijkhedsstoornis heeft een gedragsstoornis nodig!
ICD-10 diagnose impulsieve stoornis heeft B2 nodig
ICD-10 diagnose borderline persoonlijkheidsstoornis heeft minimaal 3 van de impulsieve categorie (A+B) en 2 van de borderlinecategorie postief (D)

APPENDIX VI

DUTCH VERSION OF THE INFORMANT INTERVIEW OF THE STANDARDISED ASSESSMENT OF PERSONALITY-ABBREVIATED SCALE (SAPAS-INF)

Naam:

Datum:

Ik ga u een aantal vragen stellen over uw vriend/familielids gedachten en gevoelens. Uw antwoorden zullen helpen beter te begrijpen hoe uw vriend/familielid gewoonlijk bent. Als hij of zij zich de afgelopen weken of maanden anders is gaan gedragen, beantwoordt de vragen dan vanuit hoe uw vriend/familielid zich voorheen heeft gedragen. U kunt de vragen beantwoorden met 'ja' of 'nee'.

1. Heeft uw vriend/familielid in het algemeen moeite met het maken en behouden van vrienden?	Ja / Nee
2. Zou u uw vriend/familielid als een typische eenling beschrijven?	Ja / Nee
3. Heeft uw vriend/familielid in het algemeen vertrouwen in andere mensen?	Ja / Nee
4. Heeft uw vriend/ familielid gewoonlijk moeite zijn/haar zelfbeheersing te bewaren?	Ja / Nee
5. Is uw vriend/familielid impulsief van aard?	Ja / Nee
6. Maakt uw vriend/familielid zich gewoonlijk snel zorgen?	Ja / Nee
7. Heeft uw vriend/familielid in het algemeen de neiging sterk op andere te leunen?	Ja / Nee
8. Is uw vriend/familielid in het algemeen een perfectionist?	Ja / Nee

APPENDIX VII
INVITATION LETTER

Tilburg, ...

Geachte mevrouw/meneer,

U bent onlangs aangemeld bij GGZ Midden-Brabant.

Om zo goed mogelijk te bepalen welke hulp u nodig heeft, wordt u uitgenodigd voor een aantal intakegesprekken. In deze intakefase zal uw problematiek grondig bekeken worden.
Zoals gezegd zal de intake bestaan uit een aantal gesprekken waarin met u een aantal invalshoeken besproken wordt, zoals de actuele problemen of klachten, persoonlijkheid, stressfactoren, levensloop, opleiding, arbeid en dergelijke. Daarnaast is het belangrijk om invalshoeken van naasten of familie ten aanzien van uw problematiek te inventariseren.
U wordt bij ondergetekende (S. Germans) voor de intakeprocedure verwacht op:

Momenteel wordt bij GGZ- Midden Brabant getracht de intakeprocedure kwalitatief te verbeteren. Naast de gebruikelijke intakegesprekken wordt hiertoe nader onderzoek gedaan, gericht op uw klachten, karakterstructuur, uw manier om met spanning om te gaan en dergelijke. Omdat dit onderzoek een extra activiteit inhoudt, zowel van onze kant als van uw kant, hebben we toestemming gevraagd en gekregen van de Medisch Ethische Toetsingscommissie. Aan het onderzoek zijn geen risico's verbonden zodat het afsluiten van een specifieke risicoverzekering niet nodig is. De zo verkregen gegevens worden gebruikt om een nog beter beeld te krijgen van uw problematiek en daarmee de zorg optimaal af te stemmen. Uiteraard worden de gegevens volledig anoniem verwerkt om de waarde van dit onderzoek in de intakeprocedure nader te onderzoeken.

Bijgevoegd treft u reeds enkele vragenlijsten aan. U kunt deze thuis rustig alleen invullen en ingevuld mee brengen bij het eerste gesprek. Hierdoor kunt u de intakeprocedure bespoedigen. Tijdens het eerste gesprek zal met u de mogelijkheid worden besproken om informatie over uw klachten te verkrijgen van een goede vriend, partner of familielid.

Mocht u vragen hebben over deze procedure of willen afzien van nader onderzoek, dan kunt u contact opnemen met ondergetekende (S. Germans 013-5808080). Als onafhankelijk arts is drs. E. Masthoff, psychiater, beschikbaar. Indien u afziet van deze uitbreiding van de intakeprocedure, zult u worden ingepland voor een meer beperkte standaardprocedure bij een van onze voordeurmedewerkers (maatschappelijk werkers, sociaal psychiatrisch verpleegkundige en dergelijke).

Met vriendelijke groet,

Drs. S. Germans
Psychiater i.o.

Prof. Dr. P.P.G. Hodiamont
Psychiater

DANKWOORD

Beste Paul, ik ben je dankbaar voor je altijd optimistische begeleiding, toen ik in het begin toch vraagtekens zette bij de haalbaarheid van een project met Engelse vragenlijsten, Engelse artikelen schrijven met een dyslectische promovendus zag jij deze vraagtekens niet. Een naar mijn inzicht lange discussie met de medisch ethische commissie bestempelde jij als een uitdaging. Ook een verhuizing naar Noorwegen zag jij niet als een obstakel voor de voltooiing van het project.

In de supervisie-uren gebruikte jij vaak de categorale screener: 'Sara heb je het te druk of gewoon druk?' en als ik dan naar buiten liep, dacht ik: 'het werk is er niet minder op geworden maar het voelt wel beter'. Dank voor de goede woorden op het juiste moment.

Beste Guus, het eerste jaar van de promotie kwam jij wekelijks of twee wekelijks op de GGZ-MB om met mij aan de vertalingen van de screeninginstrumenten te werken. Dit viel de receptioniste op. Op een dag toen ik jou uitliet, stelde de receptioniste de vraag of ik het laatste jaar een zeer intensieve behandeling gaf aan een patiënt die soms wel meer dan 10 uur per week bedroeg. Ze realiseerde zich niet dat de behandeling andersom was. Guus, ik heb genoten van je verhalen over de praktijk als promotor. Je hebt me veel geleerd.

Beste Paul en Guus, de bijeenkomsten waren altijd voor mij erg leerzaam, en de uitkomsten vaak voor mij verbazingwekkend goed. De structuur was altijd bekend, de eerste 10 minuten wisselden jullie de nieuwtjes uit op het gebied van de werksituatie, dan ging ik alvast de koffie halen en daarna werkten we de artikelen zorgvuldig af. Met Paul achter de computer werden alle zinnen gewikt en gewogen met een voor mij verbluffend resultaat (en de helft korter dan de door mij ingebrachte versie).

Jammer genoeg is een vergadering in Noorwegen er niet van gekomen, maar ik wil jullie van harte uitnodigen voor de evaluatie van het promotieproject in Namsos.

De overige leden van de promotiecommissie, Prof. Dr. M.H.J. Bekker, Prof. Dr. Ch van Nieuwenhuizen, Prof. Dr. C.M. van der Feltz-Cornelis, Prof. Dr. J.W. Hummelen en Dr. T. Ingenhoven wil ik danken voor het beoordelen van mijn proefschrift.

Beste Erik en Fons, jullie waren voor mij het voorbeeld binnen de GGZ-MB, dat de combinatie van klinisch werk en onderzoek te doen was (of het nu altijd goed te doen was weet ik na 7 jaar niet). Jullie hulp met het hoofdstuk over de S-SCID was waardevol. Ik herinner me in het jaar voor ik begon met de promotie dat Erik als mijn supervisor een keer zei: "Gewoon beginnen Sara. Je weet toch niet waar je aan begint, maar als je niet begint, weet je het nooit. Je kunt altijd nog stoppen."

Ik wil graag Kathelijne Hilderson bedanken voor haar bijdrage aan hoofdstuk 5. Alexander Rath voor zijn enthousiaste inbreng aan hoofdstuk 7. Danielle Elshoff, Habib Kondakci, Jeroen Kloet en Cees Rijnders danken voor hun hulp bij het tot stand komen van hoofdstuk 8.

Beste Trudy, je bent een heel goede, trouwe vriendin en collega die altijd voor me probeert te zorgen (niet dat ik dat vaak toelaat). Je meningen, zowel vakinhoudelijk als privé betekenen veel voor me. Dit afgewisseld met een dosis humor, geeft onze vriendschap een bijzonder tintje.

Beste crisisdienstcollega's, beste Ad, Rob, Roos, Michael en Frank, jullie zijn voor mij heel belangrijk geweest. Er was niet gerekend op mijn komst bij het voordeurteam en daardoor kreeg ik als kantoor een bezemkast; hetgeen niet erg werkbaar was. Jullie zagen dat en hebben mij elke dag opnieuw weer een plekje gegeven op een van jullie kantoren en hebben mij gesteund met opbeurende woorden. Mijn favorieten moment van de week was de weekafsluiting, meestal op Rob of Frank zijn kamer, waarbij de week op humoristische, niet altijd genuanceerde wijze werd door genomen. Het feit dat jullie me zo goed wisten te typeren: 'Sara heeft over veel een mening maar niet van alles verstand, bijv. voetbal en wie de beste voetbalcoach is voor het Nederlands voetbalteam.' Hoewel ik niet rook, dronk ik graag mijn kopje koffie met Rob onder het afdak of in de regen. Aan het einde van dat jaar werd ik door jullie officieel betiteld als pleegkind. Een titel om trots op te zijn.

Beste dames van de receptie van de GGZ, jullie hebben we enorm geholpen met de praktische kant van het onderzoek. Het was voor mij dan ook een enorme schok om te horen dat Els overleden was, ze hield in het jaar van het onderzoek nauwgezet het selectieproces in de gaten en vulde altijd keurig mijn agenda in, en bewaakte de grenzen van wat haalbaar was en wat niet. Elke 50ste patiënt vierden we met een chocolade en een bloemetje om de moed erin te houden.

Lieve familie, ik ben jullie heel veel dank verschuldigd! Het invoeren van alle getallen in SPSS bleek een megaklus en zoals een goed 'kluwengezin' betaamd, hebben jullie me daar enorm mee geholpen, een soort klusdag maar dan anders. Lotte, die me altijd met allerlei praktische hand- en spandiensten hielp, of het nu om de afspraken met de drukker ging of om de fotograaf, Lotte heeft altijd vol overzicht! Rachel hielp met het corrigeren van de Nederlandse stukken, dat geeft een dyslectische, net geëmigreerde promovendus een goed gevoel! Mam en neef Daan hebben zich van een creatieve kant laten zien en de voorkant van het boekje vormgegeven, ik ben er trots op! Jullie steun heeft me erg geholpen en jullie stonden altijd klaar me te helpen. Pap, jouw promotie nu 21 jaar geleden heeft me geïnspireerd. In die tijd wist ik niet precies wat een promotie inhield, maar op die dag dacht ik: 'dat wil ik ook gaan doen als ik groot ben'.

Kjære ledere ved Sykehuset Namsos, kjære Elisabeth, Olav, Hilde, Bernt Harald og Arnt. Først vil jeg takke dere for den varme velkomsten jeg fikk da jeg startet ved sykehuset i 2008. Dere har også vært utrolig støttende og hjelpsomme i forhold til fullføringen av mitt doktorgradsprosjekt. Jeg vil takke for at jeg har fått tid og rammer til å fullføre prosjektet mitt, og deres positive holdning har hjulpet meg til å se at det finnes ikke problemer, bare utfordringer. Vi er allerede i gang med nye forskningsplaner, så det vil bli en spennende tid fremover.

Ik wil iedereen danken in mijn omgeving die nooit moe werd van de zin: "Ik moet aan mijn proefschrift werken…"

Jeg vil takke alle mine kolleger og venner for deres støtte, til tross for at jeg i en periode har vært i min egen "forskningsboble" og ikke spesielt sosial.

CURRICULUM VITAE

Sara Germans, geboren op 23 november 1972, behaalde in 1991 haar VWO-diploma aan het Pierson College te Den Bosch. Na een jaar geneeskunde aan het katholieke universiteit van Leuven in Belgie, is ze overstapt naar de Rijksuniversiteit te Leiden. In november 1998 behaalde zij daar haar artsexamen. Na haar examen heeft ze twee jaar als assistent geneeskunde gyneacologie gewerkt in de Isala Klinieken, locatie Weezenlanden Zwolle. Daar deed ze een studie naar post-partum depressie bij kraamvrouwen. Na deze periode heeft Sara de overstap naar psychiatrie gemaakt en ze werkte twee jaar als assistent geneeskunde niet in opleiding bij de Zwolse Poort te Raalte. Na een korte overgangsperiode in Psychiatrische ziekenhuis Duin en Bosch te Castricum, begon ze in 2001 met de opleiding tot psychiater bij de Stichting GGZ Midden-Brabant in Tilburg (A-opleider: Prof. Dr. P.P.G. Hodiamont).

In 2004 is zij begonnen met het promotie-onderzoek dat beschreven staat in dit proefschrift. In de periode van 2006 tot en met maart 2008 werkte zij als psychiater binnen de eenheid van psychose en acute behandeling bij de Stichting GGZ Midden-Brabant in Tilburg. Sinds maart 2008 is zij werkzaam als psychiater binnen de sectie voor klinische behandelingen in Helse Nord- Trøndelag, sykehuset Namsos in Noorwegen. Zij is betrokken bij wetenschappelijke onderzoeken naar noorse screeningsinstrumenten voor persoonlijkheidsstoornissen en het gebruik van dwangmaatregelen binnen de psychiatrische zorg in Nord-Trøndelag.